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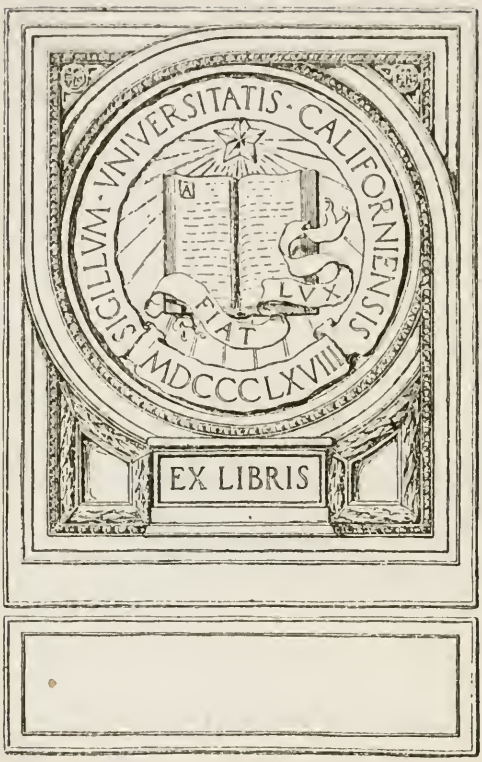
H. O. No. 202

NOON—INTERVAL TABLES

PUBLISHED BY THE HYDROGRAPHIC OFFICE
UNDER THE AUTHORITY OF THE
SECRETARY OF THE NAVY

WASHINGTON
GOVERNMENT PRINTING OFFICE
1920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NOON-INTERVAL TABLES

FIRST EDITION

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PRICE 90 CENTS

UNIV. OF
CALIFORNIA

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STATUTES OF AUTHORIZATION

There shall be a Hydrographic Office attached to the Bureau of Navigation in the Navy Department, for the improvement of the means for navigating safely the vessels of the Navy and of the mercantile marine, by providing, under the authority of the Secretary of the Navy, accurate and cheap nautical charts, sailing directions, navigators, and manuals of instructions for the use of all vessels of the United States, and for the benefit and use of navigators generally. (R. S. 431.)

The Secretary of the Navy is authorized to cause to be prepared, at the Hydrographic Office attached to the Bureau of Navigation in the Navy Department, maps, charts, and nautical books relating to and required in navigation, and to publish and furnish them to navigators at the cost of printing and paper, and to purchase the plates and copyrights of such existing maps, charts, navigators, sailing directions, and instructions, as he may consider necessary, and when he may deem it expedient to do so, and under such regulations and instructions as he may prescribe. (R. S. 432.)

NOON-INTERVAL TABLES

The result computed from the morning time-sight of the sun, usually stated as the local apparent time, gives also the angle at the pole, or difference of longitude expressed in hours, minutes, and seconds, between the meridian of the observer and the meridian passing through the geographical position of the sun, or that place on the surface of the globe which has the sun in its zenith at the instant of observation. When the observer remains stationary, the interval of time that must elapse before the sun crosses his meridian, or the arrival of apparent noon, is therefore given by the number of hours, minutes, and seconds in this angle at the pole, or hour-angle, which interval is equal to the remainder found by subtracting from 12 hours the local apparent time. But when the observer is changing his place, if his movement has a component of change of place to the eastward or to the westward, that is, a component of change of longitude, the interval to noon will be shortened or lengthened according as his change of place causes him to move to the eastward to meet the sun, or to the westward to be overtaken by the sun.

The rate of change of longitude of the sun's geographical position in its diurnal path from east to west is 15° or 900′ per hour, and if to this be added the hourly change in longitude of the observer when his change of place is to the eastward, or if from it be subtracted his hourly change in longitude when his change of place is to the westward, the result will be the rate of approach per hour of the meridian of the sun toward the meridian of the observer, expressed in minutes of arc of longitude. And this rate of approach being divided into the number of minutes of arc expressing the difference of longitude which separates the meridians of the sun and the observer at the instant of the morning time-sight, will give the interval to noon expressed in hours and fractions of an hour, provided the course and speed of the vessel remain uniform or, at least, the rate of change of longitude continues the same throughout.

With the aim of obviating the necessity on the part of navigators of arithmetical computations in finding the interval to noon for use in setting the ship's clock to the time of apparent noon and in ascertaining the run of the vessel from the morning time-sight until noon, the midshipmen of the class of 1921 of the United States Naval Academy, serving in the U. S. S. *Wisconsin* of the Midshipmen Practice Squadron, during the summer of 1919, worked out values extending throughout the scope of the present tables, under the direction of Lieut. Commander W. D. La Mont, United States Navy, by proceeding according to the formula deduced by Midshipman (now Lieut. Commander) Chapman Coleman Todd, jr., of the class of 1913 of the United States Naval Academy. By subsequent revision of this work in the Hydrographic Office the results now presented in the tables were obtained.

Side by side in each double column of the tables the interval to noon is stated in hours and decimals of an hour to the fourth decimal place, and also in hours, minutes, and seconds, reckoned from the local apparent time stated at the head of the column,

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and corresponding to values of the hourly change of longitude of the observer ranging from 1′ to 40′, both to the eastward and to the westward. The local apparent times for which the intervals to noon are tabulated extend from 7 a. m. to 10 a. m. every 30 seconds.

For purposes of illustration the following example is given:

The navigator of a vessel steaming on a course 66° (true) finds from an a. m. observation of the sun, taken at W. T. $8^h\ 00^m\ 02^s.5$, that the L. A. T. is $8^h\ 17^m\ 30^s$, corresponding to the latitude by D. R. 38° 03.′2 N. The vessel continues on this course at a speed of 11.7 knots until noon. Find the interval that will have elapsed when noon arrives, also the run to noon, and the change that will be necessary in the setting of the watch so that it will indicate 12 o'clock when noon arrives.

From the Traverse Tables the departure corresponding to the distance 11.7 on course 66°, is 10.69, which, in latitude 38°, is equivalent to a difference of longitude of 13.′6. Entering the Noon-Interval Tables in the column whose heading is L. A. T. $8^h\ 17^m\ 30^s$, and interpolating between the tabulated values for 13′ hourly change of longitude to the eastward and 14′ hourly change of longitude to the eastward, the interval to noon corresponding to 13.′6 hourly change of longitude to the eastward will be found to be $3^h.6531$, or $3^h\ 39^m\ 11^s$. Multiplying 11.7 by 3.6531 gives 42.7 nautical miles as the run to noon. The W. T. of noon would be $8^h\ 00^m\ 02^s.5$ plus $3^h\ 39^m\ 11^s$, or $11^h\ 39^m\ 13^s.5$; hence the watch would have to be set ahead $20^m\ 46^s.5$ in order to indicate 12 o'clock upon the arrival of apparent noon.

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	7h 00m 00s		7h 00m 30s		7h 01m 00s		7h 01m 30s		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
'	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	'
1	4.9945	4 59 40	4.9862	4 59 10	4.9778	4 58 40	4.9695	4 58 10	1
2	4.9889	4 59 20	4.9807	4 58 51	4.9723	4 58 20	4.9639	4 57 50	2
3	4.9834	4 59 00	4.9752	4 58 31	4.9667	4 58 00	4.9584	4 57 30	3
4	4.9779	4 58 40	4.9696	4 58 11	4.9612	4 57 40	4.9529	4 57 10	4
5	4.9724	4 58 21	4.9641	4 57 51	4.9557	4 57 20	4.9474	4 56 51	5
6	4.9669	4 58 01	4.9586	4 57 31	4.9503	4 57 01	4.9419	4 56 31	6
7	4.9614	4 57 41	4.9531	4 57 11	4.9448	4 56 41	4.9365	4 56 11	7
8	4.9559	4 57 21	4.9476	4 56 51	4.9394	4 56 22	4.9310	4 55 51	8
9	4.9505	4 57 01	4.9422	4 56 31	4.9340	4 56 02	4.9256	4 55 32	9
10	4.9451	4 56 42	4.9368	4 56 12	4.9286	4 55 43	4.9203	4 55 13	10
11	4.9407	4 56 23	4.9314	4 55 53	4.9232	4 55 24	4.9149	4 54 53	11
12	4.9343	4 56 03	4.9260	4 55 34	4.9178	4 55 04	4.9096	4 54 34	12
13	4.9279	4 55 43	4.9206	4 55 15	4.9124	4 54 45	4.8042	4 54 15	13
14	4.9235	4 55 24	4.9152	4 54 55	4.9070	4 54 25	4.8988	4 53 56	14
15	4.9181	4 55 05	4.9098	4 54 35	4.9016	4 54 06	4.8934	4 53 37	15
16	4.9127	4 54 45	4.9045	4 54 16	4.8962	4 53 46	4.8880	4 53 17	16
17	4.9073	4 54 26	4.8992	4 53 57	4.8909	4 53 27	4.8827	4 52 58	17
18	4.9019	4 54 07	4.8938	4 53 37	4.8856	4 53 08	4.8774	4 52 39	18
19	4.8966	4 53 47	4.8885	4 53 18	4.8803	4 52 49	4.8721	4 52 19	19
20	4.8913	4 53 29	4.8832	4 52 59	4.8750	4 52 30	4.8668	4 52 00	20
21	4.8860	4 53 09	4.8779	4 52 40	4.8697	4 52 11	4.8615	4 51 41	21
22	4.8807	4 52 50	4.8726	4 52 21	4.8644	4 51 52	4.8562	4 51 22	22
23	4.8754	4 52 31	4.8673	4 52 02	4.8592	4 51 33	4.8509	4 51 03	23
24	4.8701	4 52 12	4.8621	4 51 44	4.8540	4 51 14	4.8457	4 50 45	24
25	4.8649	4 51 54	4.8568	4 51 25	4.8487	4 50 55	4.8405	4 50 26	25
26	4.8596	4 51 34	4.8516	4 51 06	4.8434	4 50 36	4.8353	4 50 07	26
27	4.8543	4 51 16	4.8463	4 50 47	4.8381	4 50 17	4.8301	4 49 48	27
28	4.8491	4 50 51	4.8410	4 50 28	4.8329	4 49 58	4.8249	4 49 29	28
29	4.8439	4 50 38	4.8358	4 50 09	4.8277	4 49 40	4.8197	4 49 11	29
30	4.8387	4 50 19	4.8306	4 49 51	4.8226	4 49 21	4.8145	4 48 52	30
31	4.8335	4 50 00	4.8254	4 49 32	4.8174	4 49 02	4.8093	4 48 33	31
32	4.8283	4 49 42	4.8202	4 49 13	4.8122	4 48 44	4.8042	4 48 15	32
33	4.8231	4 49 23	4.8151	4 48 55	4.8071	4 48 26	4.7991	4 47 56	33
34	4.8179	4 49 04	4.8100	4 48 37	4.8019	4 48 07	4.7940	4 47 37	34
35	4.8128	4 48 46	4.8049	4 48 18	4.7968	4 47 48	4.7888	4 47 19	35
36	4.8076	4 48 27	4.7997	4 47 59	4.7916	4 47 30	4.7836	4 47 01	36
37	4.8025	4 48 09	4.7946	4 47 40	3.7865	4 47 11	4.7785	4 46 43	37
38	4.7974	4 47 51	4.7895	4 47 22	4.7814	4 46 53	4.7734	4 46 24	38
39	4.7923	4 47 32	4.7843	4 47 03	4.7763	4 46 35	4.7683	4 46 06	39
40	4.7872	4 47 14	4.7791	4 46 45	4.7713	4 46 17	4.7633	4 45 48	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$7^h\ 02^m\ 00^s$		$7^h\ 02^m\ 30^s$		$7^h\ 03^m\ 00^s$		$7^h\ 03^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
'	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	'
1	4.9612	4 57 40	4.9529	4 57 10	4.9446	4 56 41	4.9363	4 56 11	1
2	4.9557	4 57 20	4.9474	4 56 50	4.9391	4 56 21	4.9309	4 55 51	2
3	4.9502	4 57 01	4.9419	4 56 30	4.9336	4 56 01	4.9254	4 55 31	3
4	4.9447	4 56 41	4.9364	4 56 11	4.9281	4 55 41	4.9199	4 55 12	4
5	4.9393	4 56 21	4.9309	4 55 51	4.9227	4 55 22	4.9144	4 54 52	5
6	4.9338	4 56 02	4.9255	4 55 31	4.9173	4 55 02	4.9089	4 54 32	6
7	4.9294	4 55 42	4.9200	4 55 12	4.9119	4 54 42	4.9035	4 54 13	7
8	4.9220	4 55 22	4.9146	4 54 52	4.9064	4 54 23	4.8981	4 53 53	8
9	4.9176	4 55 03	4.9092	4 54 33	4.9010	4 54 04	4.8928	4 53 34	9
10	4.9121	4 54 43	4.9038	4 54 14	4.8956	4 53 45	4.8874	4 53 15	10
11	4.9077	4 54 24	4.8985	4 53 54	4.8902	4 53 25	4.8820	4 52 55	11
12	4.9013	4 54 05	4.8932	4 53 35	4.8849	4 53 06	4.8767	4 52 36	12
13	4.8960	4 53 46	4.8878	4 53 15	4.8796	4 52 47	4.8714	4 52 17	13
14	4.8906	4 53 26	4.8824	4 52 56	4.8743	4 52 27	4.8660	4 51 58	14
15	4.8853	4 53 07	4.8770	4 52 37	4.8689	4 52 08	4.8607	4 51 39	15
16	4.8799	4 52 48	4.8717	4 52 18	4.8636	4 51 49	4.8554	4 51 20	16
17	4.8746	4 52 29	4.8664	4 51 59	4.8583	4 51 30	4.8501	4 51 00	17
18	4.8693	4 52 10	4.8611	4 51 40	4.8530	4 51 11	4.8448	4 50 41	18
19	4.8640	4 51 50	4.8558	4 51 21	4.8477	4 50 52	4.8395	4 50 22	19
20	4.8587	4 51 31	4.8505	4 51 02	4.8424	4 50 33	4.8342	4 50 03	20
21	4.8535	4 51 13	4.8452	4 50 43	4.8371	4 50 14	4.8290	4 49 44	21
22	4.8482	4 50 54	4.8400	4 50 24	4.8319	4 49 55	4.8238	4 49 26	22
23	4.8429	4 50 34	4.8348	4 50 05	4.8267	4 49 36	4.8186	4 49 07	23
24	4.8377	4 50 16	4.8296	4 49 46	4.8215	4 49 17	4.8134	4 48 48	24
25	4.8325	4 49 57	4.8244	4 49 27	4.8163	4 48 58	4.8082	4 48 30	25
26	4.8273	4 49 38	4.8192	4 49 09	4.8111	4 48 39	4.8030	4 48 11	26
27	4.8220	4 49 19	4.8140	4 48 50	4.8059	4 48 21	4.7978	4 47 52	27
28	4.8168	4 49 00	4.8088	4 48 31	4.8007	4 48 03	4.7926	4 47 33	28
29	4.8116	4 48 42	4.8036	4 48 12	4.7955	4 47 44	4.7874	4 47 15	29
30	4.8065	4 48 23	4.7984	4 47 54	4.7903	4 47 25	4.7823	4 46 56	30
31	4.8013	4 48 05	4.7933	4 47 35	4.7852	4 47 06	4.7772	4 46 38	31
32	4.7962	4 47 47	4.7881	4 47 17	4.7801	4 46 48	4.7721	4 46 20	32
33	4.7911	4 47 28	4.7830	4 46 58	4.7750	4 46 30	4.7670	4 46 01	33
34	4.7859	4 47 09	4.7778	4 46 40	4.7698	4 46 11	4.7619	4 45 43	34
35	4.7808	4 46 51	4.7727	4 46 21	4.7647	4 45 52	4.7568	4 45 24	35
36	4.7757	4 46 32	4.7676	4 46 03	4.7596	4 45 34	4.7517	4 45 06	36
37	4.7706	4 46 14	4.7625	4 45 45	4.7546	4 45 16	4.7466	4 44 48	37
38	4.7655	4 45 56	4.7574	4 45 27	4.7495	4 44 58	4.7416	4 44 30	38
39	4.7604	4 45 37	4.7524	4 45 08	4.7444	4 44 39	4.7365	4 44 11	39
40	4.7553	4 45 19	4.7473	4 44 50	4.7394	4 44 20	4.7314	4 43 53	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$7^h\ 04^m\ 00^s$		$7^h\ 04^m\ 30^s$		$7^h\ 05^m\ 00^s$		$7^h\ 05^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	4.9278	4 55 40	4.9196	4 55 11	4.9112	4 54 40	4.9029	4 54 10	1
2	4.9223	4 55 20	4.9141	4 54 51	4.9057	4 54 21	4.8975	4 53 51	2
3	4.9168	4 55 00	4.9086	4 54 31	4.9002	4 54 01	4.8921	4 53 31	3
4	4.9114	4 54 41	4.9032	4 54 12	4.8948	4 53 41	4.8867	4 53 12	4
5	4.9060	4 54 21	4.8978	4 53 52	4.8894	4 53 22	4.8813	4 52 52	5
6	4.9006	4 54 02	4.8924	4 53 33	4.8840	4 53 02	4.8759	4 52 33	6
7	4.8952	4 53 43	4.8870	4 53 13	4.8786	4 52 43	4.8705	4 52 14	7
8	4.8898	4 53 23	4.8816	4 52 54	4.8732	4 52 24	4.8651	4 51 54	8
9	4.8845	4 53 04	4.8763	4 52 35	4.8679	4 52 05	4.8598	4 51 35	9
10	4.8791	4 52 45	4.8709	4 52 15	4.8626	4 51 45	4.8544	4 51 16	10
11	4.8737	4 52 25	4.8656	4 51 56	4.8573	4 51 26	4.8491	4 50 57	11
12	4.8684	4 52 06	4.8603	4 51 37	4.8520	4 51 07	4.8438	4 50 38	12
13	4.8630	4 51 47	4.8550	4 51 18	4.8467	4 50 48	4.8385	4 50 19	13
14	4.8577	4 51 28	4.8497	4 50 58	4.8414	4 50 29	4.8332	4 49 59	14
15	4.8524	4 51 09	4.8444	4 50 39	4.8361	4 50 10	4.8279	4 49 40	15
16	4.8470	4 50 49	4.8391	4 50 20	4.8308	4 49 51	4.8226	4 49 21	16
17	4.8419	4 50 31	4.8338	4 50 02	4.8255	4 49 32	4.8173	4 49 02	17
18	4.8366	4 50 12	4.8285	4 49 42	4.8203	4 49 13	4.8121	4 48 43	18
19	4.8314	4 49 53	4.8232	4 49 24	4.8150	4 48 54	4.8069	4 48 24	19
20	4.8261	4 49 34	4.8179	4 49 04	4.8098	4 48 35	4.8016	4 48 06	20
21	4.8208	4 49 15	4.8127	4 48 45	4.8046	4 48 16	4.7964	4 47 47	21
22	4.8156	4 48 56	4.8075	4 48 27	4.7994	4 47 57	4.7912	4 47 28	22
23	4.8104	4 48 37	4.8023	4 48 08	4.7942	4 47 39	4.7861	4 47 10	23
24	4.8052	4 48 19	4.7972	4 47 50	4.7890	4 47 20	4.7809	4 46 51	24
25	4.8000	4 48 00	4.7920	4 47 31	4.7838	4 47 01	4.7757	4 46 33	25
26	4.7948	4 47 41	4.7868	4 47 12	4.7786	4 46 43	4.7705	4 46 14	26
27	4.7896	4 47 23	4.7816	4 46 53	4.7734	4 46 24	4.7654	4 45 55	27
28	4.7844	4 47 04	4.7764	4 46 35	4.7683	4 46 06	4.7602	4 45 37	28
29	4.7793	4 46 45	4.7713	4 46 17	4.7632	4 45 47	4.7551	4 45 18	29
30	4.7742	4 46 27	4.7661	4 45 58	4.7581	4 45 29	4.7500	4 45 00	30
31	4.7691	4 46 09	4.7610	4 45 40	4.7530	4 45 11	4.7450	4 44 42	31
32	4.7640	4 45 50	4.7559	4 45 21	4.7479	4 44 52	4.7399	4 44 24	32
33	4.7589	4 45 32	4.7509	4 45 03	4.7428	4 44 34	4.7348	4 44 05	33
34	4.7538	4 45 13	4.7458	4 44 45	4.7377	4 44 15	4.7297	4 43 47	34
35	4.7487	4 44 55	4.7407	4 44 27	4.7326	4 43 57	4.7246	4 43 29	35
36	4.7436	4 44 37	4.7356	4 44 08	4.7275	4 43 39	4.7195	4 43 10	36
37	4.7385	4 44 19	4.7305	4 43 50	4.7225	4 43 21	4.7145	4 42 52	37
38	4.7335	4 44 01	4.7255	4 43 32	4.7175	4 43 03	4.7095	4 42 34	38
39	4.7284	4 43 42	4.7204	4 43 13	4.7124	4 42 45	4.7045	4 42 16	39
40	4.7234	4 43 24	4.7154	4 42 55	4.7074	4 42 27	4.6995	4 41 58	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$7^h\ 06^m\ 00^s$		$7^h\ 06^m\ 30^s$		$7^h\ 07^m\ 00^s$		$7^h\ 07^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	4.8946	4 53 41	4.8863	4 53 11	4.8779	4 52 40	4.8696	4 52 11	1
2	4.8892	4 53 21	4.8809	4 52 51	4.8725	4 52 21	4.8642	4 51 51	2
3	4.8837	4 53 01	4.8755	4 52 32	4.8671	4 52 02	4.8588	4 51 32	3
4	4.8783	4 52 42	4.8701	4 52 12	4.8617	4 51 42	4.8534	4 51 12	4
5	4.8729	4 52 22	4.8647	4 51 53	4.8563	4 51 23	4.8480	4 50 52	5
6	4.8675	4 52 03	4.8593	4 51 33	4.8509	4 51 03	4.8426	4 50 33	6
7	4.8622	4 51 44	4.8539	4 51 14	4.8456	4 50 44	4.8373	4 50 14	7
8	4.8568	4 51 24	4.8485	4 50 55	4.8403	4 50 25	4.8320	4 49 55	8
9	4.8515	4 51 05	4.8432	4 50 36	4.8350	4 50 06	4.8267	4 49 36	9
10	4.8462	4 50 46	4.8379	4 50 16	4.8297	4 49 47	4.8214	4 49 17	10
11	4.8409	4 50 27	4.8326	4 49 57	4.8244	4 49 28	4.8161	4 48 57	11
12	4.8356	4 50 08	4.8273	4 49 38	4.8192	4 49 09	4.8108	4 48 39	12
13	4.8303	4 49 49	4.8220	4 49 19	4.8139	4 48 50	4.8055	4 48 20	13
14	4.8250	4 49 30	4.8167	4 49 00	4.8036	4 48 31	4.8002	4 48 01	14
15	4.8197	4 49 11	4.8114	4 48 41	4.8033	4 48 12	4.7950	4 47 42	15
16	4.8144	4 48 52	4.8061	4 48 22	4.7980	4 47 53	4.7897	4 47 23	16
17	4.8092	4 48 33	4.8009	4 48 04	4.7928	4 47 34	4.7845	4 47 04	17
18	4.8040	4 48 14	4.7957	4 47 45	4.7876	4 47 15	4.7793	4 46 46	18
19	4.7987	4 47 55	4.7905	4 47 26	4.7824	4 46 57	4.7741	4 46 27	19
20	4.7935	4 47 37	4.7853	4 47 07	4.7772	4 46 38	4.7690	4 46 08	20
21	4.7883	4 47 18	4.7801	4 46 48	4.7720	4 46 19	4.7638	4 45 49	21
22	4.7831	4 46 59	4.7750	4 46 30	4.7668	4 46 00	4.7586	4 45 31	22
23	4.7779	4 46 41	4.7698	4 46 11	4.7617	4 45 42	4.7534	4 45 12	23
24	4.7727	4 46 22	4.7646	4 45 53	4.7565	4 45 23	4.7483	4 44 54	24
25	4.7676	4 46 03	4.7595	4 45 34	4.7514	4 45 05	4.7431	4 44 35	25
26	4.7624	4 45 45	4.7543	4 45 15	4.7462	4 44 46	4.7380	4 44 17	26
27	4.7573	4 45 26	4.7492	4 44 57	4.7411	4 44 28	4.7329	4 43 59	27
28	4.7521	4 45 08	4.7441	4 44 38	4.7360	4 44 10	4.7279	4 43 40	28
29	4.7470	4 44 49	4.7390	4 44 20	4.7309	4 43 51	4.7228	4 43 22	29
30	4.7419	4 44 31	4.7339	4 44 02	4.7258	4 43 33	4.7177	4 43 04	30
31	4.7368	4 44 12	4.7288	4 43 44	4.7208	4 43 15	4.7126	4 42 45	31
32	4.7317	4 43 54	4.7237	4 43 25	4.7157	4 42 57	4.7076	4 42 27	32
33	4.7267	4 43 36	4.7186	4 43 07	4.7106	4 42 38	4.7026	4 42 09	33
34	4.7216	4 43 18	4.7135	4 42 49	4.7055	4 42 20	4.6976	4 41 51	34
35	4.7166	4 43 00	4.7086	4 42 31	4.7005	4 42 02	4.6926	4 41 33	35
36	4.7116	4 42 42	4.7035	4 42 13	4.6955	4 41 44	4.6875	4 41 15	36
37	4.7066	4 42 24	4.6985	4 41 55	4.6905	4 41 26	4.6825	4 40 57	37
38	4.7016	4 42 06	4.6935	4 41 37	4.6855	4 41 08	4.6775	4 40 39	38
39	4.6965	4 41 47	4.6885	4 41 19	4.6805	4 40 50	4.6725	4 40 21	39
40	4.6915	4 41 29	4.6835	4 41 01	4.6755	4 40 32	4.6676	4 40 03	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$7^h\ 08^m\ 00^s$		$7^h\ 08^m\ 30^s$		$7^h\ 09^m\ 00^s$		$7^h\ 09^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	4.8612	4 51 40	4.8530	4 51 10	4.8446	4 50 41	4.8364	4 50 11	1
2	4.8558	4 51 21	4.8476	4 50 51	4.8392	4 50 21	4.8310	4 49 52	2
3	4.8505	4 51 02	4.8422	4 50 32	4.8339	4 50 02	4.8256	4 49 32	3
4	4.8451	4 50 42	4.8368	4 50 12	4.8286	4 49 43	4.8203	4 49 13	4
5	4.8397	4 50 23	4.8314	4 49 53	4.8232	4 49 24	4.8150	4 48 54	5
6	4.8343	4 50 03	4.8261	4 49 34	4.8179	4 49 04	4.8096	4 48 35	6
7	4.8290	4 50 44	4.8208	4 49 15	4.8126	4 48 45	4.8043	4 48 15	7
8	4.8237	4 49 25	4.8155	4 48 56	4.8073	4 48 26	4.7990	4 47 56	8
9	4.8184	4 49 06	4.8102	4 48 37	4.8020	4 48 07	4.7937	4 47 37	9
10	4.8132	4 48 48	4.8049	4 48 18	4.7967	4 47 48	4.7885	4 47 19	10
11	4.8079	4 48 28	4.7996	4 47 59	4.7914	4 47 29	4.7833	4 47 00	11
12	4.8026	4 48 09	4.7944	4 47 40	4.7862	4 47 10	4.7780	4 46 41	12
13	4.7973	4 47 50	4.7892	4 47 21	4.7810	4 46 52	4.7727	4 46 22	13
14	4.7921	4 47 32	4.7840	4 47 02	4.7758	4 46 33	4.7675	4 46 04	14
15	4.7869	4 47 13	4.7787	4 46 43	4.7706	4 46 14	4.7623	4 45 45	15
16	4.7816	4 46 54	4.7735	4 46 24	4.7654	4 45 55	4.7571	4 45 26	16
17	4.7764	4 46 35	4.7683	4 46 06	4.7602	4 45 37	4.7520	4 45 07	17
18	4.7712	4 46 16	4.7631	4 45 47	4.7550	4 45 18	4.7468	4 44 48	18
19	4.7660	4 45 58	4.7579	4 45 28	4.7498	4 44 59	4.7416	4 44 30	19
20	4.7608	4 45 39	4.7527	4 45 10	4.7446	4 44 41	4.7364	4 44 11	20
21	4.7556	4 45 20	4.7475	4 44 51	4.7394	4 44 22	4.7313	4 43 53	21
22	4.7505	4 45 02	4.7424	4 44 33	4.7342	4 44 03	4.7262	4 43 34	22
23	4.7454	4 44 43	4.7373	4 44 14	4.7291	4 43 45	4.7211	4 43 16	23
24	4.7403	4 44 25	4.7322	4 43 56	4.7240	4 43 26	4.7160	4 42 58	24
25	4.7352	4 44 07	4.7271	4 43 37	4.7189	4 43 08	4.7109	4 42 39	25
26	4.7301	4 43 48	4.7220	4 43 19	4.7138	4 42 50	4.7058	4 42 21	26
27	4.7250	4 43 30	4.7169	4 43 00	4.7087	4 42 31	4.7007	4 42 03	27
28	4.7199	4 43 12	4.7118	4 42 42	4.7036	4 42 13	4.6956	4 41 44	28
29	4.7148	4 42 53	4.7067	4 42 24	4.6985	4 41 55	4.6905	4 41 26	29
30	4.7097	4 42 35	4.7016	4 42 06	4.6935	4 41 37	4.6855	4 41 08	30
31	4.7046	4 42 16	4.6966	4 41 48	4.6885	4 41 19	4.6805	4 40 50	31
32	4.6995	4 41 58	4.6919	4 41 29	4.6835	4 41 01	4.6754	4 40 31	32
33	4.6945	4 41 40	4.6865	4 41 11	4.6784	4 40 42	4.6704	4 40 13	33
34	4.6895	4 41 22	4.6815	4 40 53	4.6734	4 40 24	4.6654	4 39 55	34
35	4.6845	4 41 04	4.6765	4 40 35	4.6684	4 40 06	4.6605	4 39 38	35
36	4.6795	4 40 46	4.6715	4 40 17	4.6634	4 39 48	4.6555	4 39 20	36
37	4.6745	4 40 28	4.6665	4 39 59	4.6585	4 39 31	4.6505	4 39 02	37
38	4.6695	4 40 10	4.6616	4 39 42	4.6536	4 39 13	4.6456	4 38 44	38
39	4.6645	4 39 52	4.6566	4 39 24	4.6486	4 38 55	4.6406	4 38 26	39
40	4.6596	4 39 34	4.6516	4 39 06	4.6436	4 38 37	4.6357	4 38 09	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$7^h\ 10^m\ 00^s$		$7^h\ 10^m\ 30^s$		$7^h\ 11^m\ 00^s$		$7^h\ 11^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	4. 8280	4 49 41	4. 8197	4 49 11	4. 8113	4 48 41	4. 8030	4 48 11	1
2	4. 8226	4 49 21	4. 8144	4 48 52	4. 8060	4 48 22	4. 7977	4 47 52	2
3	4. 8173	4 49 02	4. 8091	4 48 33	4. 8007	4 48 03	4. 7924	4 47 33	3
4	4. 8120	4 48 43	4. 8038	4 48 14	4. 7953	4 47 43	4. 7871	4 47 14	4
5	4. 8066	4 48 24	4. 7985	4 47 55	4. 7900	4 47 24	4. 7818	4 46 54	5
6	4. 8013	4 48 05	4. 7932	4 47 36	4. 7847	4 47 05	4. 7765	4 46 35	6
7	4. 7960	4 47 46	4. 7879	4 47 16	4. 7794	4 46 46	4. 7712	4 46 16	7
8	4. 7907	4 47 27	4. 7826	4 46 57	4. 7742	4 46 27	4. 7659	4 45 57	8
9	4. 7855	4 47 08	4. 7773	4 46 38	4. 7690	4 46 08	4. 7607	4 45 39	9
10	4. 7802	4 46 49	4. 7720	4 46 19	4. 7637	4 45 49	4. 7554	4 45 20	10
11	4. 7750	4 46 30	4. 7668	4 46 00	4. 7585	4 45 31	4. 7502	4 45 01	11
12	4. 7698	4 46 11	4. 7616	4 45 42	4. 7533	4 45 12	4. 7450	4 44 42	12
13	4. 7646	4 45 53	4. 7564	4 45 23	4. 7481	4 44 53	4. 7398	4 44 23	13
14	4. 7594	4 45 34	4. 7512	4 45 04	4. 7429	4 44 34	4. 7346	4 44 05	14
15	4. 7542	4 45 15	4. 7460	4 44 46	4. 7377	4 44 16	4. 7295	4 43 46	15
16	4. 7490	4 44 56	4. 7408	4 44 27	4. 7325	4 43 57	4. 7243	4 43 27	16
17	4. 7438	4 44 38	4. 7356	4 44 08	4. 7274	4 43 39	4. 7191	4 43 09	17
18	4. 7386	4 44 19	4. 7304	4 43 49	4. 7222	4 43 20	4. 7140	4 42 50	18
19	4. 7334	4 44 00	4. 7252	4 43 31	4. 7171	4 43 01	4. 7089	4 42 32	19
20	4. 7283	4 43 42	4. 7201	4 43 12	4. 7120	4 42 43	4. 7038	4 42 14	20
21	4. 7232	4 43 24	4. 7150	4 42 54	4. 7069	4 42 25	4. 6987	4 41 55	21
22	4. 7180	4 43 05	4. 7099	4 42 36	4. 7018	4 42 06	4. 6936	4 41 37	22
23	4. 7129	4 42 46	4. 7048	4 42 17	4. 6967	4 41 48	4. 6885	4 41 19	23
24	4. 7078	4 42 28	4. 6997	4 41 59	4. 6916	4 41 30	4. 6834	4 41 00	24
25	4. 7027	4 42 10	4. 6947	4 41 41	4. 6865	4 41 11	4. 6783	4 40 42	25
26	4. 6977	4 41 52	4. 6896	4 41 22	4. 6814	4 40 53	4. 6733	4 40 24	26
27	4. 6926	4 41 33	4. 6845	4 41 04	4. 6763	4 40 35	4. 6683	4 40 06	27
28	4. 6875	4 41 15	4. 6794	4 40 46	4. 6713	4 40 17	4. 6632	4 39 48	28
29	4. 6824	4 40 57	4. 6744	4 40 28	4. 6663	4 39 59	4. 6582	4 39 30	29
30	4. 6774	4 40 39	4. 6694	4 40 10	4. 6613	4 39 41	4. 6532	4 39 12	30
31	4. 6724	4 40 21	4. 6644	4 39 52	4. 6563	4 39 23	4. 6482	4 38 54	31
32	4. 6674	4 40 03	4. 6594	4 39 34	4. 6513	4 39 05	4. 6432	4 38 36	32
33	4. 6624	4 39 45	4. 6544	4 39 16	4. 6463	4 38 47	4. 6383	4 38 18	33
34	4. 6574	4 39 27	4. 6494	4 38 58	4. 6413	4 38 29	4. 6333	4 38 00	34
35	4. 6524	4 39 09	4. 6444	4 38 40	4. 6363	4 38 11	4. 6284	4 37 42	35
36	4. 6474	4 38 51	4. 6394	4 38 22	4. 6314	4 37 53	4. 6234	4 37 24	36
37	4. 6425	4 38 33	4. 6345	4 38 04	4. 6265	4 37 36	4. 6185	4 37 07	37
38	4. 6375	4 38 15	4. 6296	4 37 47	4. 6216	4 37 18	4. 6136	4 36 49	38
39	4. 6326	4 37 57	4. 6246	4 37 29	4. 6166	4 37 00	4. 6086	4 36 31	39
40	4. 6277	4 37 40	4. 6197	4 37 11	4. 6117	4 36 42	4. 6037	4 36 13	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$7^h\ 12^m\ 00^s$		$7^h\ 12^m\ 30^s$		$7^h\ 13^m\ 00^s$		$7^h\ 13^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	4.7947	4 47 41	4.7864	4 47 11	4.7780	4 46 41	4.7697	4 46 11	1
2	4.7893	4 47 21	4.7811	4 46 52	4.7727	4 46 22	4.7644	4 45 52	2
3	4.7840	4 47 02	4.7757	4 46 33	4.7674	4 46 03	4.7591	4 45 33	3
4	4.7787	4 46 43	4.7704	4 46 13	4.7621	4 45 44	4.7538	4 45 14	4
5	4.7734	4 46 24	4.7652	4 45 55	4.7568	4 45 25	4.7486	4 44 55	5
6	4.7681	4 46 05	4.7599	4 45 36	4.7516	4 45 06	4.7434	4 44 36	6
7	4.7629	4 45 46	4.7547	4 45 17	4.7464	4 44 47	4.7382	4 44 18	7
8	4.7577	4 45 28	4.7494	4 44 58	4.7412	4 44 28	4.7329	4 43 58	8
9	4.7525	4 45 09	4.7442	4 44 39	4.7360	4 44 10	4.7277	4 43 40	9
10	4.7473	4 44 50	4.7390	4 44 20	4.7308	4 43 51	4.7225	4 43 21	10
11	4.7421	4 44 32	4.7338	4 44 02	4.7256	4 43 32	4.7173	4 43 02	11
12	4.7369	4 44 13	4.7286	4 43 43	4.7204	4 43 13	4.7122	4 42 44	12
13	4.7317	4 43 54	4.7234	4 43 24	4.7152	4 42 55	4.7071	4 42 26	13
14	4.7265	4 43 36	4.7182	4 43 06	4.7100	4 42 36	4.7019	4 42 07	14
15	4.7213	4 43 17	4.7131	4 42 47	4.7048	4 42 17	4.6968	4 41 48	15
16	4.7161	4 42 58	4.7079	4 42 28	4.6997	4 41 59	4.6916	4 41 30	16
17	4.7110	4 42 40	4.7028	4 42 10	4.6947	4 41 41	4.6865	4 41 11	17
18	4.7059	4 42 21	4.6977	4 41 52	4.6896	4 41 22	4.6814	4 40 53	18
19	4.7008	4 42 03	4.6926	4 41 33	4.6844	4 41 04	4.6763	4 40 35	19
20	4.6957	4 41 45	4.6875	4 41 15	4.6793	4 40 45	4.6712	4 40 16	20
21	4.6906	4 41 26	4.6824	4 40 57	4.6742	4 40 27	4.6662	4 39 58	21
22	4.6855	4 41 08	4.6773	4 40 38	4.6691	4 40 09	4.6611	4 39 40	22
23	4.6804	4 40 49	4.6723	4 40 20	4.6641	4 39 51	4.6560	4 39 22	23
24	4.6753	4 40 31	4.6673	4 40 02	4.6591	4 39 33	4.6510	4 39 04	24
25	4.6702	4 40 13	4.6622	4 39 44	4.6540	4 39 15	4.6460	4 38 46	25
26	4.6652	4 39 55	4.6571	4 39 26	4.6490	4 38 56	4.6410	4 38 28	26
27	4.6601	4 39 36	4.6521	4 39 08	4.6440	4 38 38	4.6360	4 38 10	27
28	4.6551	4 39 18	4.6471	4 38 50	4.6390	4 38 20	4.6310	4 37 52	28
29	4.6501	4 39 00	4.6421	4 38 32	4.6340	4 38 02	4.6260	4 37 34	29
30	4.6452	4 38 43	4.6371	4 38 14	4.6290	4 37 44	4.6210	4 37 16	30
31	4.6402	4 38 25	4.6321	4 37 56	4.6240	4 37 26	4.6161	4 36 58	31
32	4.6352	4 38 07	4.6271	4 37 38	4.6190	4 37 08	4.6111	4 36 40	32
33	4.6302	4 37 49	4.6222	4 37 20	4.6141	4 36 51	4.6062	4 36 22	33
34	4.6252	4 37 31	4.6172	4 37 02	4.6092	4 36 33	4.6012	4 36 04	34
35	4.6203	4 37 13	4.6123	4 36 44	4.6043	4 36 15	4.5963	4 35 47	35
36	4.6153	4 36 55	4.6074	4 36 27	4.5994	4 35 58	4.5914	4 35 29	36
37	4.6104	4 36 38	4.6025	4 36 09	4.5945	4 35 40	4.5865	4 35 11	37
38	4.6055	4 36 20	4.5976	4 35 51	4.5896	4 35 22	4.5816	4 34 54	38
39	4.6006	4 36 02	4.5927	4 35 34	4.5847	4 35 05	4.5767	4 34 36	39
40	4.5957	4 35 45	4.5878	4 35 16	4.5798	4 34 47	4.5718	4 34 18	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$7^h\ 14^m\ 00^s$		$7^h\ 14^m\ 30^s$		$7^h\ 15^m\ 00^s$		$7^h\ 15^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	4.7615	4 45 41	4.7530	4 45 11	4.7447	4 44 41	4.7364	4 44 11	1
2	4.7562	4 45 22	4.7477	4 44 52	4.7395	4 44 22	4.7311	4 43 52	2
3	4.7509	4 45 03	4.7424	4 44 33	4.7342	4 44 03	4.7259	4 43 33	3
4	4.7456	4 44 44	4.7372	4 44 14	4.7290	4 43 44	4.7207	4 43 15	4
5	4.7404	4 44 25	4.7320	4 43 55	4.7238	4 43 26	4.7155	4 42 56	5
6	4.7352	4 44 07	4.7268	4 43 36	4.7186	4 43 07	4.7103	4 42 37	6
7	4.7299	4 43 48	4.7216	4 43 18	4.7134	4 42 48	4.7051	4 42 18	7
8	4.7247	4 43 29	4.7164	4 42 59	4.7082	4 42 30	4.6999	4 42 00	8
9	4.7195	4 43 10	4.7112	4 42 40	4.7030	4 42 11	4.6947	4 41 41	9
10	4.7143	4 42 51	4.7060	4 42 22	4.6978	4 41 52	4.6896	4 41 22	10
11	4.7092	4 42 39	4.7008	4 42 03	4.6927	4 41 34	4.6844	4 41 04	11
12	4.7040	4 42 14	4.6957	4 41 25	4.6876	4 41 15	4.6792	4 40 45	12
13	4.6988	4 41 56	4.6905	4 41 26	4.6824	4 40 57	4.6741	4 40 27	13
14	4.6937	4 41 37	4.6854	4 41 07	4.6773	4 40 38	4.6690	4 40 08	14
15	4.6886	4 41 19	4.6803	4 40 49	4.6722	4 40 20	4.6639	4 39 50	15
16	4.6834	4 41 00	4.6752	4 40 31	4.6671	4 40 02	4.6588	4 39 32	16
17	4.6783	4 40 42	4.6701	4 40 12	4.6620	4 39 43	4.6537	4 39 14	17
18	4.6732	4 40 24	4.6650	4 39 54	4.6569	4 39 25	4.6486	4 38 55	18
19	4.6681	4 40 05	4.6599	4 39 36	4.6518	4 39 06	4.6436	4 38 27	19
20	4.6630	4 39 47	4.6549	4 39 18	4.6467	4 38 48	4.6386	4 38 19	20
21	4.6580	4 39 29	4.6499	4 39 00	4.6417	4 38 30	4.6336	4 38 01	21
22	4.6529	4 39 10	4.6448	4 38 41	4.6367	4 38 12	4.6286	4 37 43	22
23	4.6479	4 38 52	4.6398	4 38 23	4.6317	4 37 54	4.6235	4 37 25	23
24	4.6429	4 38 34	4.6347	4 38 05	4.6267	4 37 36	4.6185	4 37 07	24
25	4.6379	4 38 16	4.6297	4 37 47	4.6217	4 37 18	4.6135	4 36 49	25
26	4.6328	4 37 58	4.6247	4 37 29	4.6167	4 37 00	4.6085	4 36 31	26
27	4.6278	4 37 40	4.6197	4 37 11	4.6117	4 36 42	4.6035	4 36 13	27
28	4.6228	4 37 22	4.6147	4 36 53	4.6067	4 36 24	4.5986	4 35 55	28
29	4.6179	4 37 04	4.6097	4 36 35	4.6017	4 36 06	4.5936	4 35 37	29
30	4.6129	4 36 46	4.6048	4 36 17	4.5968	4 35 48	4.5887	4 35 19	30
31	4.6080	4 36 29	4.5999	4 36 00	4.5919	4 35 31	4.5838	4 35 02	31
32	4.6030	4 36 11	4.5950	4 35 42	4.5869	4 35 13	4.5788	4 34 44	32
33	4.5981	4 35 53	4.5901	4 35 24	4.5820	4 34 55	4.5739	4 34 26	33
34	4.5931	4 35 35	4.5852	4 35 07	4.5771	4 34 38	4.5690	4 34 08	34
35	4.5882	4 35 18	4.5803	4 34 49	4.5722	4 34 20	4.5641	4 33 51	35
36	4.5833	4 35 00	4.5754	4 34 31	4.5673	4 34 02	4.5592	4 33 33	36
37	4.5784	4 34 42	4.5705	4 34 14	4.5624	4 32 45	4.5543	4 33 16	37
38	4.5736	4 34 25	4.5656	4 33 56	4.5576	4 33 27	4.5495	4 32 58	38
39	4.5687	4 34 07	4.5607	4 33 39	4.5527	4 33 10	4.5447	4 32 41	39
40	4.5638	4 33 50	4.5559	4 33 21	4.5479	4 32 52	4.5399	4 32 24	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$7^h\ 16^m\ 00^s$		$7^h\ 16^m\ 30^s$		$7^h\ 17^m\ 00^s$		$7^h\ 17^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	4·7281	4 43 41	4·7199	4 43 12	4·7115	4 42 41	4·7031	4 42 11	1
2	4·7228	4 43 22	4·7147	4 42 53	4·7063	4 42 23	4·6978	4 41 52	2
3	4·7176	4 43 03	4·7095	4 42 34	4·7011	4 42 04	4·6925	4 41 33	3
4	4·7124	4 42 45	4·7043	4 42 15	4·6959	4 41 45	4·6873	4 41 14	4
5	4·7072	4 42 26	4·6991	4 41 57	4·6907	4 41 27	4·6821	4 40 56	5
6	4·7020	4 42 07	4·6939	4 41 38	4·6855	4 41 08	4·6769	4 40 37	6
7	4·6968	4 41 48	4·6887	4 41 19	4·6803	4 40 49	4·6718	4 40 18	7
8	4·6916	4 41 30	4·6835	4 41 01	4·6751	4 40 30	4·6668	4 40 00	8
9	4·6865	4 41 11	4·6783	4 40 42	4·6700	4 40 12	4·6617	4 39 42	9
10	4·6813	4 40 53	4·6731	4 40 23	4·6648	4 39 53	4·6566	4 39 24	10
11	4·6761	4 40 34	4·6680	4 40 05	4·6597	4 39 35	4·6515	4 39 05	11
12	4·6710	4 40 16	4·6629	4 39 46	4·6547	4 39 17	4·6464	4 38 47	12
13	4·6659	4 39 57	4·6577	4 39 28	4·6496	4 38 59	4·6413	4 38 29	13
14	4·6608	4 39 39	4·6528	4 39 10	4·6445	4 38 40	4·6362	4 38 10	14
15	4·6557	4 39 21	4·6476	4 38 51	4·6394	4 38 22	4·6312	4 37 52	15
16	4·6506	4 39 02	4·6426	4 38 33	4·6343	4 38 03	4·6261	4 37 34	16
17	4·6455	4 38 44	4·6375	4 38 15	4·6292	4 37 45	4·6210	4 37 16	17
18	4·6404	4 38 25	4·6325	4 37 57	4·6242	4 37 27	4·6160	4 36 58	18
19	4·6354	4 38 07	4·6274	4 37 39	4·6191	4 37 09	4·6110	4 36 40	19
20	4·6304	4 37 49	4·6223	4 37 20	4·6141	4 36 51	4·6060	4 36 22	20
21	4·6254	4 37 31	4·6173	4 37 02	4·6092	4 36 33	4·6010	4 36 04	21
22	4·6204	4 37 13	4·6123	4 36 44	4·6042	4 36 15	4·5960	4 35 46	22
23	4·6154	4 36 56	4·6073	4 36 26	4·5992	4 35 57	4·5910	4 35 28	23
24	4·6104	4 36 38	4·6024	4 36 09	4·5942	4 35 39	4·5861	4 35 10	24
25	4·6054	4 36 19	4·5974	4 35 51	4·5892	4 35 21	4·5811	4 34 52	25
26	4·6005	4 36 02	4·5924	4 35 33	4·5842	4 35 03	4·5762	4 34 34	26
27	4·5955	4 35 44	4·5874	4 35 15	4·5793	4 34 45	4·5712	4 34 16	27
28	4·5905	4 35 26	4·5824	4 34 57	4·5744	4 34 28	4·5663	4 33 59	28
29	4·5855	4 35 08	4·5775	4 34 39	4·5694	4 34 10	4·5614	4 33 41	29
30	4·5806	4 34 50	4·5726	4 34 21	4·5645	4 33 52	4·5565	4 33 23	30
31	4·5757	4 34 33	4·5677	4 34 04	4·5596	4 33 34	4·5515	4 33 05	31
32	4·5708	4 34 15	4·5628	4 33 46	4·5547	4 33 17	4·5466	4 32 48	32
33	4·5659	4 33 57	4·5580	4 33 29	4·5498	4 32 59	4·5417	4 32 30	33
34	4·5610	4 33 40	4·5531	4 33 11	4·5449	4 32 42	4·5369	4 32 13	34
35	4·5562	4 33 22	4·5482	4 32 54	4·5401	4 32 24	4·5321	4 31 56	35
36	4·5513	4 33 05	4·5443	4 32 39	4·5353	4 32 07	4·5272	4 31 38	36
37	4·5465	4 32 47	4·5385	4 32 19	4·5304	4 31 49	4·5224	4 31 21	37
38	4·5416	4 32 30	4·5336	4 32 01	4·5256	4 31 32	4·5176	4 31 03	38
39	4·5367	4 32 12	4·5287	4 31 43	4·5208	4 31 15	4·5128	4 30 46	39
40	4·5319	4 31 55	4·5239	4 31 26	4·5160	4 30 58	4·5080	4 30 29	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$7^h\ 18^m\ 00^s$		$7^h\ 18^m\ 30^s$		$7^h\ 19^m\ 00^s$		$7^h\ 19^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
'	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	'
1	4. 6949	4 41 42	4. 6865	4 41 11	4. 6781	4 40 41	4. 6698	4 40 11	1
2	4. 6897	4 41 23	4. 6813	4 40 53	4. 6730	4 40 23	4. 6647	4 39 53	2
3	4. 6845	4 41 04	4. 6761	4 40 34	4. 6678	4 40 04	4. 6595	4 39 34	3
4	4. 6793	4 40 45	4. 6709	4 40 15	4. 6626	4 39 45	4. 6543	4 39 16	4
5	4. 6741	4 40 27	4. 6657	4 39 57	4. 6575	4 39 27	4. 6491	4 38 57	5
6	4. 6689	4 40 08	4. 6605	4 39 38	4. 6533	4 39 12	4. 6440	4 38 38	6
7	4. 6637	4 39 49	4. 6554	4 39 20	4. 6472	4 38 50	4. 6389	4 38 20	7
8	4. 6586	4 39 31	4. 6503	4 39 01	4. 0421	4 38 32	4. 6338	4 38 02	8
9	4. 6535	4 39 13	4 6452	4 38 43	4. 6370	4 38 13	4. 6287	4 37 43	9
10	4. 6484	4 38 54	4. 6401	4 38 24	4. 6319	4 37 55	4. 6236	4 37 25	10
11	4. 6433	4 38 36	4. 6350	4 38 06	4. 6269	4 37 37	4. 6185	4 37 07	11
12	4. 6382	4 38 18	4. 6300	4 37 48	4. 6218	4 37 18	4. 6135	4 36 49	12
13	4. 6331	4 37 59	4. 6249	4 37 30	4. 6168	4 37 00	4. 6084	4 36 30	13
14	4. 6280	4 37 41	4. 6198	4 37 11	4. 6117	4 36 42	4. 6034	4 36 12	14
15	4. 6229	4 37 22	4. 6148	4 36 53	4. 6066	4 36 24	4. 5983	4 35 54	15
16	4. 6179	4 37 04	4. 6097	4 36 35	4. 6015	4 36 05	4. 5932	4 35 36	16
17	4. 6129	4 36 46	4. 6047	4 36 17	4. 5965	4 35 47	4. 5882	4 35 18	17
18	4. 6079	4 36 28	4. 5997	4 35 59	4. 5915	4 35 29	4. 5832	4 35 00	18
19	4. 6028	4 36 10	4. 5947	4 35 41	4. 5865	4 35 11	4. 5783	4 34 42	19
20	4. 5978	4 35 52	4. 5897	4 35 23	4. 5815	4 34 53	4. 5734	4 34 24	20
21	4. 5928	4 35 34	4. 5847	4 35 05	4. 5765	4 34 35	4. 5684	4 34 06	21
22	4. 5879	4 35 16	4. 5797	4 36 47	4. 5716	4 34 18	4. 5634	4 33 48	22
23	4. 5829	4 34 58	4. 5747	4 36 29	4. 5667	4 34 00	4. 5585	4 33 31	23
24	4. 5780	4 34 41	4. 5698	4 36 11	4. 5617	4 33 42	4. 5535	4 33 13	24
25	4. 5730	4 34 23	4. 5649	4 33 54	4. 5568	4 33 24	4. 5486	4 32 55	25
26	4. 5680	4 34 05	4. 5600	4 33 36	4. 5519	4 33 07	4. 5437	4 32 37	26
27	4. 5631	4 33 47	4. 5551	4 33 18	4. 5470	4 32 49	4. 5388	4 32 20	27
28	4. 5582	4 33 30	4. 5501	4 33 00	4. 5421	4 32 32	4. 5339	4 32 02	28
29	4. 5533	4 33 12	4. 5452	4 32 43	4. 5372	4 32 14	4. 5290	4 31 44	29
30	4. 5484	4 32 54	4. 5403	4 32 25	4. 5323	4 31 56	4. 5242	4 31 27	30
31	4. 5435	4 32 37	4. 5354	4 32 07	4. 5274	4 31 39	4. 5193	4 31 09	31
32	4. 5386	4 32 19	4. 5305	4 31 50	4. 5226	4 31 21	4. 5145	4 30 52	32
33	4. 5338	4 32 02	4. 5257	4 31 33	4. 5178	4 31 04	4. 5097	4 30 35	33
34	4. 5289	4 31 44	4. 5209	4 31 15	4. 5129	4 30 46	4. 5049	4 30 18	34
35	4. 5240	4 31 26	4. 5161	4 30 58	4. 5081	4 30 29	4. 5001	4 30 00	35
36	4. 5192	4 31 09	4. 5112	4 30 40	4. 5033	4 30 11	4. 4953	4 29 43	36
37	4. 5144	4 30 52	4. 5064	4 30 23	4. 4985	4 29 55	4. 4905	4 29 26	37
38	4. 5096	4 30 35	4. 5016	4 30 06	4. 4936	4 29 37	4. 4857	4 29 09	38
39	4. 5048	4 30 17	4. 4968	4 29 48	4. 4888	4 29 20	4. 4809	4 28 51	39
40	4. 5000	4 30 00	4. 4920	4 29 31	4. 4840	4 29 02	4. 4761	4 28 34	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$7^h\ 20^m\ 00^s$		$7^h\ 20^m\ 30^s$		$7^h\ 21^m\ 00^s$		$7^h\ 21^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	4. 6616	4 39 42	4. 6531	4 39 11	4. 6449	4 38 42	4. 6366	4 38 12	1
2	4. 6564	4 39 23	4. 6480	4 38 53	4. 6398	4 38 23	4. 6315	4 37 53	2
3	4. 6512	4 39 04	4. 6428	4 38 34	4. 6346	4 38 05	4. 6264	4 37 35	3
4	4. 6460	4 38 46	4. 6376	4 38 15	4. 6295	4 37 46	4. 6213	4 37 17	4
5	4. 6409	4 38 27	4. 6325	4 37 57	4. 6244	4 37 28	4. 6162	4 36 58	5
6	4. 6358	4 38 09	4. 6274	4 37 39	4. 6193	4 37 09	4. 6111	4 36 40	6
7	4. 6307	4 37 51	4. 6223	4 37 20	4. 6142	4 36 51	4. 6060	4 36 22	7
8	4. 6256	4 37 32	4. 6172	4 37 02	4. 6091	4 36 33	4. 6009	4 36 03	8
9	4. 6205	4 37 14	4. 6121	4 36 44	4. 6040	4 36 14	4. 5958	4 35 45	9
10	4. 6154	4 36 55	4. 6071	4 36 26	4. 5989	4 35 56	4. 5907	4 35 27	10
11	4. 6103	4 36 37	4. 6021	4 36 07	4. 5939	4 35 38	4. 5856	4 35 08	11
12	4. 6053	4 36 19	4. 5971	4 35 50	4. 5889	4 35 20	4. 5806	4 34 50	12
13	4. 6002	4 36 01	4. 5921	4 35 31	4. 5839	4 35 02	4. 5756	4 34 32	13
14	4. 5952	4 35 43	4. 5871	4 35 14	4. 5788	4 34 44	4. 5706	4 34 14	14
15	4. 5902	4 35 25	4. 5821	4 34 56	4. 5738	4 34 26	4. 5656	4 33 56	15
16	4. 5852	4 35 07	4. 5771	4 34 38	4. 5688	4 34 08	4. 5606	4 33 38	16
17	4. 5802	4 34 49	4. 5721	4 34 20	4. 5639	4 33 50	4. 5557	4 33 21	17
18	4. 5752	4 34 31	4. 5671	4 34 02	4. 5589	4 33 32	4. 5507	4 33 03	18
19	4. 5702	4 34 13	4. 5621	4 33 44	4. 5539	4 33 14	4. 5457	4 32 44	19
20	4. 5652	4 33 55	4. 5571	4 33 26	4. 5489	4 32 56	4. 5408	4 32 27	20
21	4. 5602	4 33 37	4. 5522	4 33 08	4. 5440	4 32 38	4. 5359	4 32 09	21
22	4. 5553	4 33 19	4. 5473	4 32 50	4. 5391	4 32 21	4. 5310	4 31 52	22
23	4. 5504	4 33 01	4. 5424	4 32 33	4. 5342	4 32 03	4. 5261	4 31 34	23
24	4. 5455	4 32 44	4. 5375	4 32 15	4. 5293	4 31 45	4. 5212	4 31 16	24
25	4. 5406	4 32 26	4. 5326	4 31 57	4. 5244	4 31 28	4. 5163	4 30 59	25
26	4. 5357	4 32 09	4. 5277	4 31 40	4. 5195	4 31 10	4. 5114	4 30 41	26
27	4. 5308	4 31 51	4. 5228	4 31 22	4. 5146	4 30 53	4. 5065	4 30 23	27
28	4. 5259	4 31 33	4. 5179	4 31 04	4. 5097	4 30 35	4. 5016	4 30 06	28
29	4. 5210	4 31 16	4. 5130	4 30 47	4. 5048	4 30 17	4. 4968	4 29 48	29
30	4. 5161	4 30 58	4. 5081	4 30 29	4. 5000	4 30 00	4. 4919	4 29 31	30
31	4. 5113	4 30 41	4. 5033	4 30 12	4. 4952	4 29 43	4. 4871	4 29 14	31
32	4. 5065	4 30 23	4. 4985	4 29 55	4. 4904	4 29 25	4. 4823	4 28 56	32
33	4. 5017	4 30 06	4. 4937	4 29 37	4. 4856	4 29 08	4. 4776	4 28 40	33
34	4. 4969	4 29 49	4. 4889	4 29 20	4. 4808	4 28 50	4. 4728	4 28 22	34
35	4. 4921	4 29 32	4. 4841	4 29 03	4. 4760	4 28 34	4. 4680	4 28 05	35
36	4. 4873	4 29 14	4. 4793	4 28 45	4. 4712	4 28 16	4. 4632	4 27 48	36
37	4. 4825	4 28 57	4. 4745	4 28 28	4. 4664	4 27 59	4. 4585	4 27 31	37
38	4. 4777	4 28 40	4. 4697	4 28 11	4. 4617	4 27 42	4. 4537	4 27 14	38
39	4. 4729	4 28 22	4. 4649	4 27 54	4. 4569	4 27 25	4. 4489	4 26 56	39
40	4. 4681	4 28 05	4. 4601	4 27 36	4. 4521	4 27 08	4. 4441	4 26 39	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$7^h\ 22^m\ 00^s$		$7^h\ 22^m\ 30^s$		$7^h\ 23^m\ 00^s$		$7^h\ 23^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
'	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	'
1	4. 6282	4 37 42	4. 6200	4 37 12	4. 6116	4 36 42	4. 6032	4 36 12	1
2	4. 6231	4 37 23	4. 6149	4 36 54	4. 6066	4 36 24	4. 5981	4 35 53	2
3	4. 6180	4 37 05	4. 6098	4 36 35	4. 6015	4 36 05	4. 5930	4 35 35	3
4	4. 6129	4 36 46	4. 6047	4 36 17	4. 5964	4 35 47	4. 5880	4 35 17	4
6	4. 6078	4 36 28	4. 5996	4 35 59	4. 5913	4 35 29	4. 5829	4 34 58	5
6	4. 6027	4 36 10	4. 5945	4 35 40	4. 5862	4 35 10	4. 5779	4 34 41	6
7	4. 5976	4 35 51	4. 5894	4 35 22	4. 5811	4 34 52	4. 5728	4 34 22	7
8	4. 5925	4 35 33	4. 5843	4 35 03	4. 5760	4 34 34	4. 5677	4 34 04	8
9	4. 5874	4 35 15	4. 5793	4 34 45	4. 5710	4 34 16	4. 5627	4 33 46	9
10	4. 5824	4 34 57	4. 5742	4 34 27	4. 5659	4 33 57	4. 5577	4 33 28	10
11	4. 5775	4 34 39	4. 5692	4 34 09	4. 5609	4 33 39	4. 5527	4 33 10	11
12	4. 5725	4 34 21	4. 5642	4 33 51	4. 5559	4 33 21	4. 5478	4 32 52	12
13	4. 5675	4 34 03	4. 5593	4 33 33	4. 5509	4 33 03	4. 5428	4 32 34	13
14	4. 5625	4 33 45	4. 5543	4 33 16	4. 5459	4 32 45	4. 5378	4 32 16	14
15	4. 5575	4 33 27	4. 5493	4 32 57	4. 5409	4 32 27	4. 5328	4 31 58	15
16	4. 5525	4 33 09	4. 5443	4 32 39	4. 5359	4 32 09	4. 5278	4 31 40	16
17	4. 5476	4 32 51	4. 5393	4 32 21	4. 5310	4 31 52	4. 5229	4 31 22	17
18	4. 5426	4 32 33	4. 5344	4 32 04	4. 5261	4 31 34	4. 5180	4 31 05	18
19	4. 5376	4 32 15	4. 5294	4 31 46	4. 5212	4 31 16	4. 5131	4 30 47	19
20	4. 5326	4 31 57	4. 5245	4 31 28	4. 5163	4 30 59	4. 5082	4 30 30	20
21	4. 5277	4 31 40	4. 5196	4 31 11	4. 5114	4 30 41	4. 5033	4 30 12	21
22	4. 5228	4 31 22	4. 5147	4 30 53	4. 5065	4 30 23	4. 4984	4 29 54	22
23	4. 5179	4 31 04	4. 5098	4 30 35	4. 5016	4 30 06	4. 4935	4 29 37	23
24	4. 5130	4 30 48	4. 5049	4 30 18	4. 4967	4 29 48	4. 4887	4 29 19	24
25	4. 5081	4 30 29	4. 5000	4 30 00	4. 4918	4 29 30	4. 4839	4 29 02	25
26	4. 5032	4 30 12	4. 4952	4 29 43	4. 4869	4 29 13	4. 4790	4 28 44	26
27	4. 4983	4 29 54	4. 4904	4 29 25	4. 4821	4 28 56	4. 4742	4 28 27	27
28	4. 4935	4 29 37	4. 4855	4 29 08	4. 4773	4 28 38	4. 4694	4 28 10	28
29	4. 4887	4 29 19	4. 4806	4 28 50	4. 4725	4 28 21	4. 4645	4 27 52	29
30	4. 4839	4 29 02	4. 4758	4 28 33	4. 4677	4 28 04	4. 4597	4 27 35	30
31	4. 4791	4 28 45	4. 4710	4 28 16	4. 4629	4 27 46	4. 4549	4 27 18	31
32	4. 4743	4 28 28	4. 4662	4 27 58	4. 4581	4 27 29	4. 4501	4 27 00	32
33	4. 4695	4 28 10	4. 4614	4 27 41	4. 4533	4 27 12	4. 4454	4 26 43	33
34	4. 4647	4 27 53	4. 4567	4 27 24	4. 4485	4 26 55	4. 4406	4 26 26	34
35	4. 4599	4 27 36	4. 4520	4 27 07	4. 4437	4 26 37	4. 4359	4 26 09	35
36	4. 4551	4 27 18	4. 4472	4 26 50	4. 4390	4 26 20	4. 4311	4 25 52	36
37	4. 4504	4 27 01	4. 4424	4 26 33	4. 4343	4 26 03	4. 4264	4 25 35	37
38	4. 4456	4 26 44	4. 4377	4 26 16	4. 4296	4 25 47	4. 4217	4 25 18	38
39	4. 4409	4 26 27	4. 4329	4 25 58	4. 4249	4 25 30	4. 4169	4 25 01	39
40	4. 4362	4 26 10	4. 4282	4 25 42	4. 4202	4 25 13	4. 4122	4 24 44	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	7h 24m 00s		7h 24m 30s		7h 25m 00s		7h 25m 30s		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	4. 5949	4 35 42	4. 5866	4 35 12	4. 5782	4 34 42	4. 5700	4 34 12	1
2	4. 5898	4 35 23	4. 5815	4 34 53	4. 5731	4 34 23	4. 5649	4 33 54	2
3	4. 5847	4 35 05	4. 5764	4 34 35	4. 5680	4 34 05	4. 5598	4 33 35	3
4	4. 5796	4 34 47	4. 5713	4 34 17	4. 5630	4 33 47	4. 5548	4 33 17	4
5	4. 5746	4 34 29	4. 5663	4 33 59	4. 5580	4 33 29	4. 5498	4 32 59	5
6	4. 5696	4 34 11	4. 5612	4 33 40	4. 5529	4 33 10	4. 5448	4 32 41	6
7	4. 5645	4 33 52	4. 5562	4 33 22	4. 5479	4 32 52	4. 5398	4 32 23	7
8	4. 5595	4 33 34	4. 5512	4 33 04	4. 5429	4 32 34	4. 5348	4 32 05	8
9	4. 5545	4 33 16	4. 5462	4 32 46	4. 5380	4 32 17	4. 5297	4 31 47	9
10	4. 5495	4 32 58	4. 5412	4 32 28	4. 5330	4 31 59	4. 5247	4 31 29	10
11	4. 5445	4 32 40	4. 5362	4 32 10	4. 5280	4 31 41	4. 5197	4 31 11	11
12	4. 5395	4 32 22	4. 5313	4 31 53	4. 5230	4 31 23	4. 5148	4 30 53	12
13	4. 5345	4 32 04	4. 5263	4 31. 35	4. 5181	4 31 05	4. 5099	4 30 36	13
14	4. 5295	4 31 46	4. 5213	4 31 17	4. 5131	4 30 47	4. 5049	4 30 18	14
15	4. 5246	4 31 29	4. 5163	4 30 59	4. 5082	4 30 30	4. 5000	4 30 00	15
16	4. 5196	4 31 11	4. 5114	4 30 41	4. 5032	4 30 12	4. 4951	4 29 42	16
17	4. 5147	4 30 53	4. 5065	4 30 23	4. 4983	4 29 54	4. 4902	4 29 25	17
18	4. 5098	4 30 35	4. 5016	4 30 06	4. 4934	4 29 36	4. 4853	4 29 07	18
19	4. 5049	4 30 18	4. 4967	4 29 48	4. 4885	4 29 19	4. 4804	4 28 49	19
20	4. 5000	4 30 00	4. 4918	4 29 30	4. 4837	4 29 01	4. 4755	4 28 32	20
21	4. 4951	4 29 42	4. 4869	4 29 13	4. 4788	4 28 44	4. 4707	4 28 15	21
22	4. 4903	4 29 25	4. 4821	4 28 56	4. 4739	4 28 26	4. 4659	4 27 57	22
23	4. 4854	4 29 07	4. 4773	4 28 38	4. 4691	4 28 09	4. 4611	4 27 40	23
24	4. 4805	4 28 50	4. 4724	4 28 21	4. 4643	4 27 51	4. 4563	4 27 23	24
25	4. 4756	4 28 32	4. 4676	4 28 03	4. 4595	4 27 34	4. 4514	4 27 05	25
26	4. 4708	4 28 15	4. 4627	4 27 46	4. 4547	4 27 17	4. 4466	4 26 48	26
27	4. 4660	4 27 57	4. 4579	4 27 28	4. 4499	4 27 00	4. 4418	4 26 30	27
28	4. 4612	4 27 40	4. 4531	4 27 11	4. 4451	4 26 42	4. 4370	4 26 13	28
29	4. 4564	4 27 23	4. 4483	4 26 54	4. 4403	4 26 25	4. 4322	4 25 56	29
30	4. 4516	4 27 06	4. 4435	4 26 37	4. 4355	4 26 08	4. 4274	4 25 39	30
31	4. 4469	4 26 49	4. 4388	4 26 20	4. 4307	4 25 51	4. 4227	4 25 22	31
32	4. 4421	4 26 32	4. 4340	4 26 02	4. 4259	4 25 33	4. 4180	4 25 05	32
33	4. 4373	4 26 14	4. 4293	4 25 45	4. 4212	4 25 16	4. 4133	4 24 48	33
34	4. 4325	4 25 57	4. 4245	4 25 28	4. 4164	4 24 59	4. 4085	4 24 31	34
35	4. 4278	4 25 40	4. 4198	4 25 11	4. 4117	4 24 42	4. 4038	4 24 14	35
36	4. 4231	4 25 23	4. 4151	4 24 54	4. 4070	4 24 25	4. 3991	4 23 57	36
37	4. 4184	4 25 06	4. 4104	4 24 37	4. 4023	4 24 08	4. 3944	4 23 40	37
38	4. 4137	4 24 49	4. 4057	4 24 21	4. 3976	4 23 51	4. 3897	4 23 23	38
39	4. 4089	4 24 32	4. 4010	4 24 04	4. 3929	4 23 34	4. 3850	4 23 06	39
40	4. 4043	4 24 15	4. 3963	4 23 47	4. 3883	4 23 18	4. 3803	4 22 49	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$7^h\ 26^m\ 00^s$		$7^h\ 26^m\ 30^s$		$7^h\ 27^m\ 00^s$		$7^h\ 27^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	4·5616	4 33 42	4·5533	4 33 12	4·5449	4 32 42	4·5367	4 32 12	1
2	4·5565	4 33 23	4·5483	4 32 54	4·5398	4 32 23	4·5316	4 31 54	2
3	4·5515	4 33 05	4·5433	4 32 36	4·5348	4 32 05	4·5266	4 31 36	3
4	4·5465	4 32 47	4·5383	4 32 17	4·5298	4 31 47	4·5216	4 31 18	4
5	4·5414	4 32 29	4·5333	4 31 59	4·5248	4 31 29	4·5166	4 31 00	5
6	4·5364	4 31 11	4·5283	4 31 41	4·5198	4 31 11	4·5116	4 30 42	6
7	4·5314	4 31 53	4·5233	4 31 23	4·5148	4 30 53	4·5066	4 30 24	7
8	4·5264	4 31 35	4·5183	4 31 05	4·5098	4 30 35	4·5016	4 30 06	8
9	4·5215	4 31 17	4·5133	4 30 48	4·5049	4 30 18	4·4967	4 29 48	9
10	4·5165	4 30 59	4·5083	4 30 30	4·5000	4 30 00	4·4918	4 29 30	10
11	4·5115	4 30 41	4·5033	4 30 14	4·4950	4 29 42	4·4869	4 29 13	11
12	4·5066	4 30 24	4·4984	4 29 54	4·4901	4 29 24	4·4820	4 28 55	12
13	4·5017	4 30 06	4·4935	4 29 37	4·4852	4 29 07	4·4771	4 28 38	13
14	4·4968	4 29 48	4·4886	4 29 19	4·4803	4 28 49	4·4722	4 28 20	14
15	4·4919	4 29 31	4·4837	4 29 01	4·4754	4 28 31	4·4673	4 28 02	15
16	4·4870	4 29 13	4·4788	4 28 43	4·4705	4 28 14	4·4624	4 27 45	16
17	4·4821	4 28 56	4·4739	4 28 26	4·4656	4 27 56	4·4575	4 27 27	17
18	4·4772	4 28 38	4·4690	4 28 08	4·4607	4 27 39	4·4526	4 27 09	18
19	4·4723	4 28 20	4·4641	4 27 51	4·4559	4 27 21	4·4477	4 26 52	19
20	4·4674	4 28 03	4·4592	4 27 33	4·4511	4 27 04	4·4429	4 26 34	20
21	4·4626	4 27 45	4·4544	4 27 16	4·4462	4 26 46	4·4381	4 26 17	21
22	4·4578	4 27 28	4·4496	4 27 00	4·4414	4 26 29	4·4333	4 26 00	22
23	4·4530	4 27 11	4·4448	4 26 41	4·4366	4 26 12	4·4285	4 25 43	23
24	4·4482	4 26 54	4·4400	4 26 24	4·4318	4 25 54	4·4237	4 25 25	24
25	4·4434	4 26 36	4·4352	4 26 07	4·4270	4 25 37	4·4189	4 25·08	25
26	4·4386	4 26 19	4·4304	4 25 49	4·4222	4 25 19	4·4141	4 24 51	26
27	4·4338	4 26 01	4·4256	4 25 32	4·4175	4 25 03	4·4094	4 24 34	27
28	4·4290	4 25 44	4·4208	4 25 15	4·4127	4 24 46	4·4046	4 24 16	28
29	4·4242	4 25 27	4·4161	4 24 58	4·4079	4 24 28	4·3999	4 24 00	29
30	4·4194	4 25 10	4·4113	4 24 41	4·4032	4 24 12	4·3952	4 23 43	30
31	4·4146	4 24 53	4·4065	4 24 23	4·3985	4 23 55	4·3905	4 23 26	31
32	4·4098	4 24 35	4·4018	4 24 06	4·3937	4 23 37	4·3858	4 23 09	32
33	4·4051	4 24 18	4·3971	4 23 50	4·3890	4 23 20	4·3811	4 22 52	33
34	4·4004	4 24 01	4·3924	4 23 32	4·3843	4 23 03	4·3764	4 22 35	34
35	4·3957	4 23 45	4·3878	4 23 16	4·3796	4 22 46	4·3717	4 22 18	35
36	4·3920	4 23 31	4·3831	4 22 59	4·3749	4 22 30	4·3670	4 21 01	36
37	4·3863	4 23 11	4·3784	4 22 42	4·3702	4 22 13	4·3624	4 21 45	37
38	4·3816	4 22 54	4·3737	4 22 25	4·3656	4 21 56	4·3577	4 21 28	38
39	4·3769	4 22 37	4·3690	4 22 08	4·3610	4 21 40	4·3530	4 21 11	39
40	4·3723	4 22 20	4·3644	4 21 52	4·3564	4 21 23	4·3484	4 20 54	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$7^h\ 28^m\ 00^s$		$7^h\ 28^m\ 30^s$		$7^h\ 29^m\ 00^s$		$7^h\ 29^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	4. 5284	4 31 42	4. 5200	4 31 12	4. 5117	4 30 42	4. 5034	4 30 12	1
2	4. 5234	4 31 24	4. 5149	4 30 54	4. 5067	4 30 24	4. 4984	4 29 53	2
3	4. 5184	4 31 06	4. 5099	4 30 36	4. 5017	4 30 06	4. 4934	4 29 36	3
4	4. 5134	4 30 48	4. 5049	4 30 18	4. 4967	4 29 48	4. 4884	4 29 18	4
5	4. 5084	4 30 30	4. 5000	4 30 00	4. 4917	4 29 30	4. 4834	4 29 00	5
6	4. 5034	4 30 12	4. 4950	4 29 42	4. 4868	4 29 12	4. 4784	4 28 42	6
7	4. 4984	4 29 54	4. 4900	4 29 24	4. 4818	4 28 54	4. 4735	4 28 25	7
8	4. 4934	4 29 36	4. 4851	4 29 06	4. 4768	4 28 36	4. 4686	4 28 07	8
9	4. 4885	4 29 19	4. 4802	4 28 49	4. 4719	4 28 19	4. 4637	4 27 49	9
10	4. 4835	4 29 01	4. 4753	4 28 31	4. 4670	4 28 01	4. 4588	4 27 32	10
11	4. 4786	4 28 43	4. 4704	4 28 13	4. 4621	4 27 44	4. 4539	4 27 14	11
12	4. 4737	4 28 25	4. 4655	4 27 56	4. 4572	4 27 26	4. 4491	4 26 57	12
13	4. 4688	4 28 08	4. 4606	4 27 38	4. 4523	4 27 08	4. 4442	4 26 39	13
14	4. 4639	4 27 50	4. 4557	4 27 21	4. 4475	4 26 51	4. 4393	4 26 21	14
15	4. 4590	4 27 32	4. 4508	4 27 03	4. 4427	4 26 34	4. 4344	4 26 04	15
16	4. 4541	4 27 15	4. 4459	4 26 45	4. 4378	4 26 16	4. 4295	4 25 46	16
17	4. 4493	4 26 57	4. 4410	4 26 28	4. 4329	4 25 58	4. 4247	4 25 29	17
18	4. 4445	4 26 40	4. 4362	4 26 10	4. 4281	4 25 41	4. 4199	4 25 12	18
19	4. 4396	4 26 23	4. 4314	4 25 53	4. 4233	4 25 24	4. 4151	4 24 54	19
20	4. 4348	4 26 05	4. 4266	4 25 36	4. 4185	4 25 07	4. 4103	4 24 37	20
21	4. 4300	4 25 48	4. 4218	4 25 18	4. 4137	4 24 49	4. 4056	4 24 20	21
22	4. 4252	4 25 31	4. 4170	4 25 01	4. 4089	4 24 32	4. 4008	4 24 03	22
23	4. 4204	4 25 13	4. 4122	4 24 44	4. 4041	4 24 15	4. 3961	4 23 46	23
24	4. 4156	4 24 56	4. 4075	4 24 27	4. 3993	4 23 57	4. 3913	4 23 29	24
25	4. 4108	4 24 39	4. 4027	4 24 10	4. 3946	4 23 41	4. 3865	4 23 11	25
26	4. 4060	4 24 22	4. 3980	4 23 53	4. 3898	4 23 23	4. 3817	4 22 54	26
27	4. 4013	4 24 05	4. 3932	4 23 36	4. 3851	4 23 06	4. 3770	4 22 37	27
28	4. 3965	4 23 47	4. 3885	4 23 19	4. 3804	4 22 49	4. 3723	4 22 20	28
29	4. 3918	4 23 30	4. 3837	4 23 01	4. 3757	4 22 33	4. 3676	4 22 03	29
30	4. 3871	4 23 14	4. 3790	4 22 44	4. 3710	4 22 16	4. 3629	4 21 46	30
31	4. 3824	4 22 57	4. 3743	4 22 27	4. 3663	4 21 59	4. 3582	4 21 30	31
32	4. 3777	4 22 40	4. 3696	4 22 11	4. 3616	4 21 42	4. 3535	4 21 13	32
33	4. 3730	4 22 23	4. 3649	4 21 54	4. 3569	4 21 25	4. 3489	4 20 56	33
34	4. 3683	4 22 06	4. 3602	4 21 37	4. 3523	4 21 08	4. 3442	4 20 39	34
35	4. 3637	4 21 49	4. 3555	4 21 20	4. 3476	4 20 51	4. 3396	4 20 23	35
36	4. 3590	4 21 32	4. 3509	4 21 03	4. 3429	4 20 34	4. 3350	4 20 06	36
37	4. 3543	4 21 16	4. 3463	4 20 47	4. 3383	4 20 18	4. 3303	4 19 49	37
38	4. 3497	4 20 59	4. 3417	4 20 30	4. 3337	4 20 01	4. 3257	4 19 33	38
39	4. 3450	4 20 42	4. 3370	4 20 13	4. 3290	4 19 44	4. 3211	4 19 16	39
40	4. 3404	4 20 25	4. 3324	4 19 57	4. 3244	4 19 28	4. 3165	4 18 59	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$7^h\ 30^m\ 00^s$		$7^h\ 30^m\ 30^s$		$7^h\ 31^m\ 00^s$		$7^h\ 31^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
'	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	'
1	4. 4951	4 29 42	4. 4868	4 29 12	4. 4783	4 28 42	4. 4701	4 28 12	1
2	4. 4901	4 29 24	4. 4818	4 28 54	4. 4733	4 28 24	4. 4651	4 27 54	2
3	4. 4851	4 29 06	4. 4768	4 28 36	4. 4684	4 28 06	4. 4601	4 27 36	3
4	4. 4801	4 28 48	4. 4718	4 28 18	4. 4635	4 27 49	4. 4552	4 27 19	4
5	4. 4752	4 28 31	4. 4669	4 28 01	4. 4586	4 27 31	4. 4503	4 27 01	5
6	4. 4702	4 28 13	4. 4619	4 27 43	4. 4537	4 27 14	4. 4454	4 26 43	6
7	4. 4653	4 27 55	4. 4570	4 27 25	4. 4488	4 26 56	4. 4405	4 26 26	7
8	4. 4604	4 27 37	4. 4521	4 27 08	4. 4439	4 26 38	4. 4356	4 26 08	8
9	4. 4555	4 27 20	4. 4472	4 26 50	4. 4390	4 26 20	4. 4307	4 25 51	9
10	4. 4505	4 27 02	4. 4423	4 26 32	4. 4341	4 26 03	4. 4258	4 25 33	10
11	4. 4456	4 26 44	4. 4374	4 26 15	4. 4292	4 25 45	4. 4210	4 25 16	11
12	4. 4408	4 26 27	4. 4326	4 25 57	4. 4243	4 25 27	4. 4162	4 24 58	12
13	4. 4360	4 26 10	4. 4277	4 25 40	4. 4194	4 25 10	4. 4113	4 24 41	13
14	4. 4311	4 25 52	4. 4228	4 25 22	4. 4146	4 24 53	4. 4065	4 24 23	14
15	4. 4263	4 25 35	4. 4180	4 25 05	4. 4098	4 24 35	4. 4017	4 24 06	15
16	4. 4214	4 25 17	4 4132	4 24 48	4. 4050	4 24 18	4. 3969	4 23 49	16
17	4. 4166	4 25 00	4. 4084	4 24 30	4. 4002	4 24 01	4. 3921	4 23 32	17
18	4. 4118	4 24 43	4. 4036	4 24 13	4. 3954	4 23 43	4. 3873	4 33 14	18
19	4. 4070	4 24 25	4. 3988	4 23 56	4. 3906	4 23 26	4. 3825	4 22 57	19
20	4. 4022	4 24 08	4. 3940	4 23 38	4. 3859	4 23 09	4. 3777	4 22 40	20
21	4. 3974	4 23 51	4. 3892	4 23 21	4. 3811	4 22 52	4. 3730	4 22 23	21
22	4. 3927	4 23 34	4. 3844	4 23 04	4. 3763	4 22 35	4. 3683	4 22 06	22
23	4. 3880	4 23 17	4. 3797	4 22 47	4. 3716	4 22 18	4. 3636	4 21 49	23
24	4. 3832	4 23 00	4. 3750	4 22 30	4. 3669	4 22 01	4. 3588	4 21 32	24
25	4. 3785	4 22 43	4. 3703	4 22 13	4. 3622	4 21 44	4. 3541	4 21 15	25
26	4. 3737	4 22 25	4. 3656	4 21 56	4. 3575	4 21 27	4. 3494	4 20 58	26
27	4. 3690	4 22 08	4. 3609	4 21 39	4. 3528	4 21 10	4. 3447	4 20 41	27
28	4. 3642	4 21 51	4. 3562	4 21 22	4. 3481	4 20 53	4. 3400	4 20 24	28
29	4. 3595	4 21 34	4. 3515	4 21 05	4. 3434	4 20 36	4. 3353	4 20 07	29
30	4. 3548	4 21 17	4. 3468	4 20 48	4. 3387	4 20 19	4. 3306	4 19 50	30
31	4. 3502	4 21 01	4. 3421	4 20 32	4. 3340	4 20 02	4. 3260	4 19 34	31
32	4. 3455	4 20 44	4. 3374	4 20 15	4. 3294	4 19 46	4. 3214	4 19 17	32
33	4. 3409	4 20 27	4. 3327	4 19 58	4. 3248	4 19 29	4. 3168	4 19 00	33
34	4. 3362	4 20 10	4. 3281	4 19 41	4. 3202	4 19 13	4. 3122	4 18 44	34
35	4. 3316	4 19 54	4. 3235	4 19 25	4. 3156	4 18 56	4. 3076	4 18 27	35
36	4. 3270	4 19 37	4. 3189	4 19 08	4. 3110	4 18 40	4. 3030	4 18 11	36
37	4. 3224	4 19 21	4. 3143	4 18 51	4. 3064	4 18 23	4. 2984	4 17 54	37
38	4. 3178	4 19 04	4. 3097	4 18 35	4. 3018	4 18 06	4. 2938	4 17 38	38
39	4. 3131	4 18 47	4. 3051	4 18 18	4. 2972	4 17 50	4. 2892	4 17 21	39
40	4. 3085	4 18 31	4. 3005	4 18 02	4. 2926	4 17 33	4. 2846	4 17 05	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$7^h\ 32^m\ 00^s$		$7^h\ 32^m\ 30^s$		$7^h\ 33^m\ 00^s$		$7^h\ 33^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	4.4618	4 27 42	4.4534	4 27 12	4.4451	4 26 42	4.4367	4 26 12	1
2	4.4568	4 27 24	4.4484	4 26 54	4.4401	4 26 24	4.4317	4 25 54	2
3	4.4518	4 27 06	4.4435	4 26 37	4.4352	4 26 07	4.4268	4 25 36	3
4	4.4469	4 26 49	4.4386	4 26 19	4.4303	4 25 49	4.4219	4 25 19	4
5	4.4420	4 26 31	4.4337	4 26 01	4.4254	4 25 31	4.4170	4 25 01	5
6	4.4371	4 26 14	4.4289	4 25 44	4.4205	4 25 14	4.4121	4 24 44	6
7	4.4322	4 25 56	4.4239	4 25 26	4.4156	4 24 56	4.4073	4 24 26	7
8	4.4273	4 25 38	4.4191	4 25 09	4.4107	4 24 39	4.4024	4 24 09	8
9	4.4225	4 25 21	4.4143	4 24 51	4.4060	4 24 22	4.3976	4 23 51	9
10	4.4176	4 25 03	4.4094	4 24 34	4.4011	4 24 04	4.3928	4 23 34	10
11	4.4128	4 24 46	4.4045	4 24 16	4.3962	4 23 46	4.3880	4 23 17	11
12	4.4080	4 24 29	4.3998	4 23 59	4.3915	4 23 29	4.3832	4 23 00	12
13	4.4031	4 24 11	4.3949	4 23 42	4.3866	4 23 12	4.3783	4 22 42	13
14	4.3982	4 23 54	4.3901	4 23 24	4.3818	4 22 54	4.3735	4 22 25	14
15	4.3935	4 23 37	4.3853	4 23 07	4.3770	4 22 37	4.3688	4 22 07	15
16	4.3886	4 23 19	4.3805	4 22 50	4.3722	4 22 20	4.3640	4 21 50	16
17	4.3839	4 23 02	4.3757	4 22 33	4.3675	4 22 03	4.3592	4 21 33	17
18	4.3792	4 22 45	4.3710	4 22 16	4.3627	4 21 46	4.3545	4 21 16	18
19	4.3743	4 22 27	4.3662	4 21 58	4.3580	4 21 29	4.3497	4 20 59	19
20	4.3696	4 22 11	4.3614	4 21 41	4.3533	4 21 12	4.3450	4 20 42	20
21	4.3649	4 21 54	4.3567	4 21 24	4.3485	4 20 54	4.3403	4 20 25	21
22	4.3601	4 21 36	4.3520	4 21 07	4.3438	4 20 37	4.3356	4 20 08	22
23	4.3554	4 21 19	4.3473	4 20 50	4.3391	4 20 21	4.3309	4 19 51	23
24	4.3507	4 21 03	4.3426	4 20 33	4.3344	4 20 04	4.3262	4 19 34	24
25	4.3460	4 20 46	4.3379	4 20 16	4.3297	4 19 47	4.3216	4 19 18	25
26	4.3413	4 20 29	4.3332	4 20 00	4.3250	4 19 30	4.3169	4 19 01	26
27	4.3366	4 20 12	4.3285	4 19 42	4.3204	4 19 13	4.3122	4 18 44	27
28	4.3319	4 19 55	4.3238	4 19 25	4.3157	4 18 57	4.3075	4 18 27	28
29	4.3272	4 19 38	4.3192	4 19 09	4.3110	4 18 40	4.3029	4 18 10	29
30	4.3226	4 19 21	4.3146	4 18 53	4.3065	4 18 23	4.2983	4 17 54	30
31	4.3180	4 19 05	4.3099	4 18 36	4.3018	4 18 06	4.2937	4 17 37	31
32	4.3133	4 18 48	4.3053	4 18 19	4.2971	4 17 50	4.2890	4 17 20	32
33	4.3087	4 18 31	4.3006	4 18 02	4.2926	4 17 33	4.2845	4 17 04	33
34	4.3041	4 18 15	4.2961	4 17 46	4.2880	4 17 17	4.2799	4 16 48	34
35	4.2995	4 17 58	4.2915	4 17 29	4.2834	4 17 00	4.2753	4 16 31	35
36	4.2949	4 17 42	4.2869	4 17 13	4.2788	4 16 43	4.2707	4 16 15	36
37	4.2903	4 17 25	4.2823	4 16 56	4.2743	4 16 27	4.2662	4 15 58	37
38	4.2858	4 17 09	4.2778	4 16 40	4.2697	4 16 11	4.2617	4 15 42	38
39	4.2811	4 16 52	4.2732	4 16 24	4.2651	4 15 54	4.2571	4 15 26	39
40	4.2766	4 16 36	4.2686	4 16 07	4.2606	4 15 38	4.2525	4 15 09	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$7^h\ 34^m\ 00^s$		$7^h\ 34^m\ 30^s$		$7^h\ 35^m\ 00^s$		$7^h\ 35^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	4. 4284	4 25 42	4. 4201	4 25 12	4. 4118	4 24 42	4. 4035	4 24 13	1
2	4. 4234	4 25 24	4. 4151	4 24 54	4. 4069	4 24 25	4. 3986	4 23 55	2
3	4. 4185	4 25 06	4. 4102	4 24 37	4. 4020	4 24 07	4. 3937	4 23 37	3
4	4. 4136	4 24 49	4. 4053	4 24 19	4. 3971	4 23 50	4. 3888	4 23 19	4
5	4. 4087	4 24 31	4. 4005	4 24 02	4. 3923	4 23 32	4. 3840	4 23 02	5
6	4. 4039	4 24 14	4. 3956	4 23 44	4. 3874	4 23 15	4. 3792	4 22 45	6
7	4. 3991	4 23 57	4. 3908	4 23 27	4. 3826	4 22 58	4. 3743	4 22 27	7
8	4. 3942	4 23 39	4. 3859	4 23 09	4. 3777	4 22 40	4. 3695	4 22 10	8
9	4. 3894	4 23 22	4. 3812	4 22 52	4. 3730	4 22 23	4. 3648	4 21 53	9
10	4. 3846	4 23 05	4. 3763	4 22 35	4. 3682	4 22 06	4. 3599	4 21 36	10
11	4. 3798	4 22 47	4. 3715	4 22 17	4. 3633	4 21 48	4. 3551	4 21 18	11
12	4. 3750	4 22 30	4. 3668	4 22 00	4. 3586	4 21 31	4. 3504	4 21 01	12
13	4. 3702	4 22 13	4. 3619	4 21 43	4. 3538	4 21 13	4. 3456	4 20 44	13
14	4. 3654	4 21 55	4. 3571	4 21 26	4. 3490	4 20 56	4. 3408	4 20 27	14
15	4. 3606	4 21 38	4. 3524	4 21 09	4. 3443	4 20 39	4. 3361	4 20 10	15
16	4. 3558	4 21 21	4. 3476	4 20 51	4. 3395	4 20 22	4. 3313	4 19 53	16
17	4. 3511	4 21 04	4. 3429	4 20 34	4. 3348	4 20 05	4. 3266	4 19 36	17
18	4. 3464	4 20 47	4. 3382	4 20 18	4. 3301	4 19 48	4. 3220	4 19 19	18
19	4. 3416	4 20 30	4. 3334	4 20 01	4. 3253	4 19 31	4. 3172	4 19 02	19
20	4. 3369	4 20 13	4. 3287	4 19 43	4. 3207	4 19 15	4. 3125	4 18 45	20
21	4. 3322	4 19 56	4. 3240	4 19 26	4. 3160	4 18 58	4. 3078	4 18 28	21
22	4. 3276	4 19 39	4. 3194	4 19 10	4. 3113	4 18 41	4. 3031	4 18 11	22
23	4. 3228	4 19 22	4. 3147	4 18 53	4. 3067	4 18 24	4. 2984	4 17 54	23
24	4. 3182	4 19 06	4. 3100	4 18 36	4. 3020	4 18 07	4. 2939	4 17 38	24
25	4. 3135	4 18 49	4. 3054	4 18 19	4. 2973	4 17 50	4. 2892	4 17 21	25
26	4. 3089	4 18 32	4. 3007	4 18 03	4. 2927	4 17 34	4. 2846	4 17 05	26
27	4. 3042	4 18 15	4. 2961	4 17 46	4. 2881	4 17 17	4. 2800	4 16 48	27
28	4. 2995	4 17 58	4. 2914	4 17 29	4. 2834	4 17 00	4. 2753	4 16 31	28
29	4. 2949	4 17 42	4. 2868	4 17 12	4. 2788	4 16 43	4. 2707	4 16 15	29
30	4. 2903	4 17 25	4. 2822	4 16 56	4. 2743	4 16 27	4. 2662	4 15 58	30
31	4. 2857	4 17 09	4. 2776	4 16 39	4. 2696	4 16 11	4. 2616	4 15 42	31
32	4. 2810	4 16 52	4. 2730	4 16 23	4. 2650	5 15 54	4. 2570	4 15 26	32
33	4. 2765	4 16 35	4. 2685	4 16 06	4. 2606	4 15 38	4. 2525	4 15 09	33
34	4. 2719	4 16 19	4. 2638	4 15 49	4. 2559	4 15 21	4. 2479	4 14 52	34
35	4. 2674	4 16 02	4. 2593	4 15 33	4. 2514	4 15 05	4. 2434	4 14 36	35
36	4. 2627	4 15 46	4. 2547	4 15 17	4. 2468	4 14 48	4. 2388	4 14 19	36
37	4. 2582	4 15 30	4. 2502	4 15 01	4. 2423	4 14 32	4. 2343	4 14 03	37
38	4. 2537	4 15 13	4. 2457	4 14 45	4. 2378	4 14 16	4. 2298	4 13 47	38
39	4. 2491	4 14 57	4. 2411	4 14 28	4. 2332	4 14 00	4. 2252	4 13 31	39
40	4. 2446	4 14 41	4. 2366	4 14 12	4. 2287	4 13 43	4. 2207	4 13 15	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$7^h\ 36^m\ 00^s$		$7^h\ 36^m\ 30^s$		$7^h\ 37^m\ 00^s$		$7^h\ 37^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
'	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	'
1	4.3952	4 23 43	4.3869	4 23 13	4.3785	4 22 42	4.3702	4 22 13	1
2	4.3903	4 23 25	4.3820	4 22 55	4.3736	4 22 25	4.3653	4 21 55	2
3	4.3854	4 23 07	4.3771	4 22 38	4.3688	4 22 07	4.3604	4 21 37	3
4	4.3806	4 22 50	4.3723	4 22 20	4.3640	4 21 50	4.3556	4 21 20	4
5	4.3757	4 22 33	4.3675	4 22 03	4.3591	4 21 33	4.3508	4 21 03	5
6	4.3709	4 22 15	4.3626	4 21 45	4.3543	4 21 15	4.3460	4 20 46	6
7	4.3661	4 21 58	4.3578	4 21 28	4.3495	4 20 58	4.3412	4 20 28	7
8	4.3612	4 21 40	4.3530	4 21 11	4.3447	4 20 41	4.3364	4 20 11	8
9	4.3565	4 21 23	4.3483	4 20 54	4.3400	4 20 24	4.3317	4 19 54	9
10	4.3517	4 21 06	4.3435	4 20 37	4.3352	4 20 07	4.3269	4 19 37	10
11	4.3469	4 20 49	4.3387	4 20 19	4.3304	4 19 49	4.3222	4 19 20	11
12	4.3422	4 20 32	4.3340	4 20 02	4.3257	4 19 33	4.3175	4 19 03	12
13	4.3374	4 20 15	4.3292	4 19 45	4.3210	4 19 16	4.3127	4 18 46	13
14	4.3326	4 19 57	4.3244	4 19 28	4.3162	4 18 58	4.3079	4 18 28	14
15	4.3279	4 19 40	4.3198	4 19 12	4.3115	4 18 41	4.3033	4 18 12	15
16	4.3231	4 19 23	4.3150	4 18 54	4.3068	4 18 24	4.2986	4 17 55	16
17	4.3185	4 19 06	4.3103	4 18 37	4.3021	4 18 08	4.2939	4 17 38	17
18	4.3138	4 18 49	4.3057	4 18 21	4.2971	4 17 50	4.2892	4 17 21	18
19	4.3090	4 18 32	4.3009	4 18 03	4.2927	4 17 34	4.2845	4 17 04	19
20	4.3044	4 18 16	4.2963	4 17 47	4.2881	4 17 17	4.2799	4 16 48	20
21	4.2997	4 17 59	4.2916	4 17 30	4.2834	4 17 00	4.2752	4 16 31	21
22	4.2951	4 17 42	4.2870	4 17 13	4.2788	4 16 43	4.2706	4 16 14	22
23	4.2904	4 17 25	4.2823	4 16 56	4.2742	4 16 27	4.2660	4 15 58	23
24	4.2858	4 17 09	4.2777	4 16 40	4.2695	4 16 10	4.2614	4 15 41	24
25	4.2811	4 16 52	4.2731	4 16 23	4.2649	4 15 54	4.2568	4 15 24	25
26	4.2765	4 16 35	4.2685	4 16 06	4.2603	4 15 37	4.2522	4 15 08	26
27	4.2719	4 16 19	4.2638	4 15 49	4.2557	4 15 21	4.2476	4 14 51	27
28	4.2673	4 16 02	4.2592	4 15 33	4.2511	4 15.04	4.2430	4 14 35	28
29	4.2626	4 15 45	4.2546	4 15 17	4.2465	4 14 47	4.2384	4 14 18	29
30	4.2581	4 15 29	4.2501	4 15 00	4.2422	4 14 32	4.2339	4 14 02	30
31	4.2535	4 15 13	4.2455	4 14 44	4.2374	4 14 15	4.2293	4 13 45	31
32	4.2489	4 14 56	4.2409	4 14 27	4.2328	4 13 58	4.2247	4 13 29	32
33	4.2444	4 14 40	4.2364	4 14 11	4.2284	4 13 42	4.2203	4 13 13	33
34	4.2398	4 14 23	4.2318	4 13 54	4.2238	4 13 25	4.2157	4 12 57	34
35	4.2354	4 14 07	4.2273	4 13 38	4.2193	4 13 09	4.2112	4 12 40	35
36	4.2308	4 13 51	4.2228	4 13 22	4.2147	4 12 53	4.2067	4 12 24	36
37	4.2263	4 13 35	4.2183	4.13 06	4.2105	4 12 37	4.2022	4 12 08	37
38	4.2218	4 13 18	4.2139	4 12 50	4.2058	4 12 21	4.1978	4 11 52	38
39	4.2173	4 13 02	4.2093	4 12 33	4.2013	4 12 05	4.1933	4 11 36	39
40	4.2128	4 12 46	4.2048	4 12 17	4.1968	4 11 48	4.1888	4 11 19	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$7^h\ 38^m\ 00^s$		$7^h\ 38^m\ 30^s$		$7^h\ 39^m\ 00^s$		$7^h\ 39^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	4.3618	4 21 42	4.3535	4 21 13	4.3452	4 20 43	4.3369	4 20 13	1
2	4.3568	4 21 24	4.3486	4 20 55	4.3403	4 20 25	4.3320	4 19 56	2
3	4.3521	4 21 08	4.3437	4 20 37	4.3355	4 20 08	4.3272	4 19 38	3
4	4.3473	4 20 50	4.3390	4 20 20	4.3307	4 19 51	4.3225	4 19 21	4
5	4.3425	4 20 33	4.3342	4 20 03	4.3259	4 19 33	4.3177	4 19 04	5
6	4.3377	4 20 16	4.3294	4 19 46	4.3212	4 19 16	4.3129	4 18 46	6
7	4.3329	4 19 58	4.3246	4 19 29	4.3164	4 18 59	4.3081	4 18 29	7
8	4.3281	4 19 41	4.3199	4 19 12	4.3116	4 18 42	4.3034	4 18 12	8
9	4.3234	4 19 24	4.3152	4 18 55	4.3070	4 18 25	4.2987	4 17 55	9
10	4.3187	4 19 07	4.3104	4 18 37	4.3022	4 18 08	4.2940	4 17 38	10
11	4.3139	4 18 50	4.3057	4 18 21	4.2974	4 17 51	4.2892	4 17 21	11
12	4.3092	4 18 33	4.3010	4 18 04	4.2928	4 17 34	4.2846	4 17 05	12
13	4.3045	4 18 16	4.2963	4 17 47	4.2881	4 17 17	4.2799	4 16 48	13
14	4.2997	4 17 59	4.2915	4 17 29	4.2833	4 17 00	4.2751	4 16 30	14
15	4.2951	4 17 42	4.2869	4 17 13	4.2787	4 16 43	4.2705	4 16 14	15
16	4.2903	4 17 25	4.2821	4 16 56	4.2740	4 16 26	4.2658	4 15 57	16
17	4.2857	4 17 09	4.2775	4 16 39	4.2693	4 16 09	4.2612	4 15 40	17
18	4.2810	4 16 52	4.2728	4 16 22	4.2647	4 15 53	4.2566	4 15 24	18
19	4.2763	4 16 35	4.2679	4 16 04	4.2600	4 15 36	4.2519	4 15 07	19
20	4.2717	4 16 18	4.2635	4 15 49	4.2554	4 15 19	4.2473	4 14 50	20
21	4.2671	4 16 02	4.2589	4 15 32	4.2508	4 15 03	4.2427	4 14 34	21
22	4.2625	4 15 45	4.2543	4 15 15	4.2462	4 14 46	4.2381	4 14 17	22
23	4.2578	4 15 28	4.2497	4 14 59	4.2416	4 14 30	4.2335	4 14 01	23
24	4.2532	4 15 12	4.2451	4 14 42	4.2370	4 14 13	4.2289	4 13 44	24
25	4.2486	4 14 55	4.2405	4 14 26	4.2324	4 13 57	4.2244	4 13 28	25
26	4.2440	4 14 38	4.2359	4 14 09	4.2279	4 13 40	4.2198	4 13 11	26
27	4.2395	4 14 22	4.2314	4 13 53	4.2233	4 13 24	4.2152	4 12 55	27
28	4.2349	4 14 06	4.2268	4 13 36	4.2187	4 13 07	4.2106	4 12 38	28
29	4.2303	4 13 49	4.2222	4 13 20	4.2142	4 12 51	4.2061	4 12 22	29
30	4.2258	4 13 33	4.2177	4 13 04	4.2097	4 12 35	4.2016	4 12 06	30
31	4.2212	4 13 16	4.2132	4 12 48	4.2051	4 12 18	4.1968	4 11 48	31
32	4.2167	4 13 00	4.2086	4 12 31	4.2006	4 12 02	4.1926	4 11 33	32
33	4.2122	4 12 44	4.2042	4 12 15	4.1961	4 11 46	4.1881	4 11 17	33
34	4.2076	4 12 27	4.1996	4 11 59	4.1916	4 11 30	4.1836	4 11 01	34
35	4.2032	4 12 12	4.1952	4 11 43	4.1872	4 11 14	4.1792	4 10 45	35
36	4.1986	4 11 55	4.1906	4 11 26	4.1826	4 10 57	4.1746	4 10 29	36
37	4.1942	4 11 39	4.1862	4 11 10	4.1782	4 10 42	4.1702	4 10 13	37
38	4.1898	4 11 23	4.1818	4 10 54	4.1738	4 10 25	4.1658	4 09 57	38
39	4.1852	4 11 07	4.1773	4 10 38	4.1692	4 10 09	4.1613	4 09 41	39
40	4.1808	4 10 51	4.1728	4 10 22	4.1648	4 09 53	4.1569	4 09 25	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$7^h\ 40^m\ 00^s$		$7^h\ 40^m\ 30^s$		$7^h\ 41^m\ 00^s$		$7^h\ 41^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	4. 3285	4 19 42	4. 3203	4 19 13	4. 3119	4 18 43	4. 3037	4 18 13	1
2	4. 3236	4 19 25	4. 3154	4 18 55	4. 3071	4 18 26	4. 2988	4 17 55	2
3	4. 3189	4 19 08	4. 3108	4 18 39	4. 3023	4 18 08	4. 2941	4 17 39	3
4	4. 3141	4 18 51	4. 3059	4 18 21	4. 2975	4 17 51	4. 2893	4 17 21	4
5	4. 3093	4 18 33	4. 3011	4 18 04	4. 2928	4 17 34	4. 2846	4 17 05	5
6	4. 3046	4 18 17	4. 2964	4 17 47	4. 2881	4 17 17	4. 2799	4 16 48	6
7	4. 2998	4 17 59	4. 2916	4 17 30	4. 2833	4 17 00	4. 2751	4 16 30	7
8	4. 2951	4 17 42	4. 2869	4 17 13	4. 2786	4 16 43	4. 2704	4 16 13	8
9	4. 2904	4 17 25	4. 2822	4 16 56	4. 2740	4 16 26	4. 2658	4 15 57	9
10	4. 2857	4 17 09	4. 2775	4 16 39	4. 2692	4 16 09	4. 2611	4 15 40	10
11	4. 2809	4 16 51	4. 2728	4 16 22	4. 2645	4 15 52	4. 2564	4 15 23	11
12	4. 2763	4 16 35	4. 2682	4 16 06	4. 2599	4 15 36	4. 2518	4 15 06	12
13	4. 2716	4 16 18	4. 2634	4 15 48	4. 2552	4 15 19	4. 2471	4 14 50	13
14	4. 2669	4 16 01	4. 2587	4 15 31	4. 2506	4 15 02	4. 2424	4 14 33	14
15	4. 2623	4 15 44	4. 2541	4 15 15	4. 2459	4 14 45	4. 2378	4 14 16	15
16	4. 2575	4 15 27	4. 2494	4 14 58	4. 2412	4 14 28	4. 2331	4 13 59	16
17	4. 2529	4 15 10	4. 2448	4 14 41	4. 2366	4 14 12	4. 2286	4 13 43	17
18	4. 2484	4 14 54	4. 2402	4 14 25	4. 2320	4 13 55	4. 2239	4 13 26	18
19	4. 2436	4 14 37	4. 2355	4 14 08	4. 2274	4 13 39	4. 2193	4 13 09	19
20	4. 2391	4 14 21	4. 2313	4 13 53	4. 2228	4 13 22	4. 2147	4 12 53	20
21	4. 2345	4 14 04	4. 2264	4 13 35	4. 2182	4 13 06	4. 2102	4 12 37	21
22	4. 2299	4 13 48	4. 2218	4 13 18	4. 2137	4 12 49	4. 2056	4 12 20	22
23	4. 2253	4 13 31	4. 2173	4 13 02	4. 2091	4 12 33	4. 2011	4 12 04	23
24	4. 2207	4 13 15	4. 2127	4 12 46	4. 2045	4 12 16	4. 1965	4 11 47	24
25	4. 2162	4 12 58	4. 2081	4 12 29	4. 2000	4 12 00	4. 1920	4 11 31	25
26	4. 2116	4 12 42	4. 2036	4 12 13	4. 1955	4 11 44	4. 1875	4 11 15	26
27	4. 2071	4 12 26	4. 1990	4 11 56	4. 1909	4 11 27	4. 1829	4 10 58	27
28	4. 2025	4 12 09	4. 1945	4 11 40	4. 1864	4 11 11	4. 1784	4 10 42	28
29	4. 1980	4 11 53	4. 1900	4 11 24	4. 1819	4 10 55	4. 1739	4 10 26	29
30	4. 1934	4 11 36	4. 1855	4 11 08	4. 1775	4 10 39	4. 1695	4 10 10	30
31	4. 1890	4 11 20	4. 1810	4 10 52	4. 1729	4 10 22	4. 1649	4 09 54	31
32	4. 1845	4 11 04	4. 1765	4 10 35	4. 1684	4 10 06	4. 1605	4 09 38	32
33	4. 1800	4 10 48	4. 1721	4 10 20	4. 1640	4 09 50	4. 1560	4 09 22	33
34	4. 1755	4 10 32	4. 1675	4 10 03	4. 1595	4 09 34	4. 1515	4 09 05	34
35	4. 1711	4 10 16	4. 1631	4 09 47	4. 1551	4 09 18	4. 1472	4 08 50	35
36	4. 1666	4 10 00	4. 1586	4 09 31	4. 1506	4 09 02	4 1427	4 08 34	36
37	4. 1622	4 09 44	4. 1542	4 09 15	4. 1462	4 08 46	4. 1383	4 08 18	37
38	4. 1577	4 09 28	4. 1498	4 08 59	4. 1418	4 08 30	4. 1339	4 08 02	38
39	4. 1533	4 09 12	4. 1454	4 08 43	4. 1373	4 08 14	4. 1295	4 07 46	39
40	4. 1489	4 08 56	4. 1409	4 08 27	4. 1329	4 07 58	4. 1251	4 07 30	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$7^h\ 42^m\ 00^s$		$7^h\ 42^m\ 30^s$		$7^h\ 43^m\ 00^s$		$7^h\ 43^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	4. 2953	4 17 43	4. 2870	4 17 14	4. 2786	4 16 43	4. 2703	4 16 13	1
2	4. 2904	4 17 25	4. 2821	4 16 56	4. 2738	4 16 25	4. 2655	4 15 56	2
3	4. 2857	4 17 09	4. 2774	4 16 39	4. 2690	4 16 08	4. 2608	4 15 39	3
4	4. 2809	4 16 51	4. 2727	4 16 22	4. 2643	4 15 51	4. 2561	4 15 22	4
5	4. 2762	4 16 34	4. 2680	4 16 05	4. 2596	4 15 35	4. 2514	4 15 05	5
6	4. 2715	4 16 17	4. 2632	4 15 48	4. 2551	4 15 18	4. 2467	4 14 48	6
7	4. 2668	4 16 00	4. 2585	4 15 30	4. 2502	4 15 01	4. 2420	4 14 32	7
8	4. 2621	4 15 44	4. 2538	4 15 13	4. 2455	4 14 44	4. 2373	4 14 14	8
9	4. 2575	4 15 27	4. 2492	4 14 57	4. 2409	4 14 27	4. 2327	4 13 58	9
10	4. 2527	4 15 10	4. 2445	4 14 40	4. 2362	4 14 10	4. 2281	4 13 41	10
11	4. 2481	4 14 53	4. 2398	4 14 23	4. 2316	4 13 54	4. 2234	4 13 24	11
12	4. 2435	4 14 37	4. 2353	4 14 07	4. 2270	4 13 37	4. 2188	4 13 07	12
13	4. 2388	4 14 19	4. 2306	4 13 50	4. 2223	4 13 20	4. 2142	4 12 51	13
14	4. 2341	4 14 03	4. 2259	4 13 33	4. 2176	4 13 03	4. 2095	4 12 34	14
15	4. 2295	4 13 46	4. 2213	4 13 17	4. 2131	4 12 47	4. 2049	4 12 18	15
16	4. 2248	4 13 29	4. 2167	4 13 00	4. 2084	4 12 30	4. 2003	4 12 01	16
17	4. 2203	4 13 13	4. 2121	4 12 44	4. 2039	4 12 14	4. 1957	4 11 45	17
18	4. 2157	4 12 57	4. 2075	4 12 27	4. 1993	4 11 57	4. 1912	4 11 28	18
19	4. 2110	4 12 40	4. 2029	4 12 10	4 1947	4 11 41	4. 1866	4 11 12	19
20	4. 2065	4 12 23	4. 1984	4 11 54	4. 1902	4 11 25	4. 1821	4 10 56	20
21	4. 2019	4 12 07	4. 1938	4 11 37	4. 1856	4 11 08	4. 1775	4 10 39	21
22	4. 1974	4 11 51	4. 1891	4 11 21	4. 1811	4 10 52	4. 1730	4 10 23	22
23	4. 1929	4 11 34	4. 1847	4 11 05	4. 1766	4 10 36	4. 1685	4 10 06	23
24	4. 1883	4 11 18	4. 1802	4 10 49	4. 1721	4 10 20	4. 1640	4 09 50	24
25	4. 1838	4 11 01	4. 1757	4 10 33	4. 1675	4 10 03	4. 1595	4 09 34	25
26	4. 1793	4 10 45	4. 1712	4 10 16	4. 1630	4 09 47	4. 1550	4 09 18	26
27	4. 1747	4 10 29	4. 1667	4 10 00	4. 1585	4 09 30	4. 1505	4 09 02	27
28	4. 1702	4 10 13	4. 1622	4 09 44	4. 1540	4 09 14	4. 1460	4 08 46	28
29	4. 1657	4 09 57	4. 1577	4 09 28	4. 1495	4 08 58	4 1415	4 08 29	29
30	4. 1613	4 09 41	4. 1533	4 09 12	4. 1452	4 08 43	4. 1371	4 08 14	30
31	4. 1568	4 09 24	4. 1488	4 08 55	4. 1407	4 08 27	4. 1326	4 07 57	31
32	4. 1523	4 09 08	4. 1443	4 08 39	4. 1362	4 08 10	4. 1282	4 07 42	32
33	4. 1479	4 08 52	4. 1399	4 08 24	4. 1318	4 07 54	4. 1238	4 07 25	33
34	4. 1435	4 08 37	4. 1354	4 08 07	4. 1274	4 07 39	4. 1194	4 07 10	34
35	4. 1390	4 08 21	4. 1310	4 07 52	4. 1230	4 07 23	4. 1150	4 06 54	35
36	4. 1345	4 08 04	4. 1266	4 07 36	4. 1185	4 07 06	4. 1105	4 06 38	36
37	4. 1302	4 07 49	4. 1222	4 07 20	4. 1142	4 06 51	4. 1062	4 06 22	37
38	4. 1258	4 07 33	4. 1178	4 07 04	4. 1098	4 06 35	4. 1018	4 06 06	38
39	4. 1214	4 07 17	4. 1134	4 06 48	4. 1054	4 06 19	4. 0974	4 05 51	39
40	4. 1170	4 07 01	4. 1090	4 06 32	4. 1010	4 06 04	4. 0931	4 05 35	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$7^h\ 44^m\ 00^s$		$7^h\ 44^m\ 30^s$		$7^h\ 45^m\ 00^s$		$7^h\ 45^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	4.2620	4 15 43	4.2536	4 15 13	4.2453	4 14 43	4.2370	4 14 13	1
2	4.2572	4 15 26	4.2488	4 14 55	4.2405	4 14 26	4.2322	4 13 56	2
3	4.2525	4 15 09	4.2441	4 14 39	4.2358	4 14 09	4.2276	4 13 39	3
4	4.2478	4 14 52	4.2395	4 14 22	4.2312	4 13 52	4.2229	4 13 22	4
5	4.2431	4 14 35	4.2348	4 14 05	4.2265	4 13 35	4.2182	4 13 06	5
6	4.2384	4 14 18	4.2301	4 13 48	4.2218	4 13 18	4.2136	4 12 49	6
7	4.2337	4 14 01	4.2254	4 13 31	4.2172	4 13 02	4.2089	4 12 32	7
8	4.2290	4 13 44	4.2207	4 13 15	4.2125	4 12 45	4.2043	4 12 15	8
9	4.2245	4 13 28	4.2160	4 12 58	4.2079	4 12 28	4.1997	4 11 59	9
10	4.2198	4 13 11	4.2115	4 12 41	4.2033	4 12 12	4.1951	4 11 42	10
11	4.2151	4 12 54	4.2069	4 12 25	4.1986	4 11 55	4.1905	4 11 26	11
12	4.2105	4 12 38	4.2023	4 12 08	4.1941	4 11 39	4.1859	4 11 09	12
13	4.2059	4 12 21	4.1977	4 11 52	4.1895	4 11 22	4.1813	4 10 53	13
14	4.2013	4 12 05	4.1931	4 11 35	4.1848	4 11 05	4.1767	4 10 36	14
15	4.1967	4 11 48	4.1885	4 11 18	4.1803	4 10 49	4.1722	4 10 20	15
16	4.1921	4 11 32	4.1839	4 11 02	4.1757	4 10 33	4.1675	4 10 03	16
17	4.1875	4 11 15	4.1794	4 10 46	4.1712	4 10 16	4.1630	4 09 47	17
18	4.1830	4 10 59	4.1748	4 10 29	4.1667	4 10 00	4.1585	4 09 30	18
19	4.1784	4 10 42	4.1702	4 10 13	4.1621	4 09 44	4.1539	4 09 14	19
20	4.1739	4 10 26	4.1657	4 09 57	4.1576	4 09 27	4.1495	4 08 58	20
21	4.1694	4 10 10	4.1612	4 09 40	4.1531	4 09 11	4.1450	4 08 42	21
22	4.1648	4 09 53	4.1567	4 09 24	4.1486	4 08 55	4.1405	4 08 26	22
23	4.1604	4 09 37	4.1522	4 09 08	4.1441	4 08 39	4.1360	4 08 10	23
24	4.1558	4 09 21	4.1477	4 08 52	4.1396	4 08 23	4.1315	4 07 53	24
25	4.1514	4 09 05	4.1433	4 08 36	4.1351	4 08 06	4.1271	4 07 38	25
26	4.1469	4 08 49	4.1387	4 08 19	4.1306	4 07 50	4.1226	4 07 21	26
27	4.1424	4 08 33	4.1343	4 08 03	4.1262	4 07 34	4.1181	4 07 05	27
28	4.1379	4 08 16	4.1298	4 07 47	4.1217	4 07 18	4.1137	4 06 49	28
29	4.1334	4 08 00	4.1254	4 07 31	4.1173	4 07 02	4.1092	4 06 33	29
30	4.1291	4 07 45	4.1210	4 07 16	4.1129	4 06 46	4.1049	4 06 18	30
31	4.1246	4 07 29	4.1165	4 06 59	4.1085	4 06 30	4.1005	4 06 02	31
32	4.1201	4 07 12	4.1121	4 06 44	4.1040	4 06 14	4.0960	4 05 46	32
33	4.1157	4 06 57	4.1077	4 06 28	4.0997	4 05 59	4.0916	4 05 30	33
34	4.1113	4 06 41	4.1033	4 06 12	4.0953	4 05 43	4.0873	4 05 14	34
35	4.1070	4 06 25	4.0989	4 05 56	4.0909	4 05 27	4.0829	4 04 58	35
36	4.1025	4 06 09	4.0945	4 05 40	4.0865	4 05 11	4.0785	4 04 42	36
37	4.0982	4 05 54	4.0902	4 05 25	4.0822	4 04 56	4.0742	4 04 27	37
38	4.0938	4 05 37	4.0858	4 05 09	4.0778	4 04 40	4.0699	4 04 12	38
39	4.0894	4 05 22	4.0814	4 04 53	4.0735	4 04 25	4.0655	4 03 56	39
40	4.0851	4 05 06	4.0771	4 04 38	4.0691	4 04 09	4.0612	4 03 40	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	7h 46m 00s		7h 46m 30s		7h 47m 00s		7h 47m 30s		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
'	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	'
1	4. 2286	4 13 43	4. 2204	4 13 13	4. 2120	4 12 43	4. 2038	4 12 13	1
2	4. 2239	4 13 26	4. 2154	4 12 55	4. 2073	4 12 26	4. 1990	4 11 56	2
3	4. 2192	4 13 09	4. 2109	4 12 39	4. 2026	4 12 09	4. 1944	4 11 40	3
4	4. 2145	4 12 52	4. 2063	4 12 23	4. 1980	4 11 53	4. 1898	4 11 23	4
5	4. 2099	4 12 36	4. 2016	4 12 06	4. 1934	4 11 36	4. 1851	4 11 06	5
6	4. 2052	4 12 19	4. 1970	4 11 49	4. 1887	4 11 19	4. 1805	4 10 50	6
7	4. 2006	4 12 02	4. 1924	4 11 33	4. 1841	4 11 03	4. 1759	4 10 33	7
8	4. 1959	4 11 45	4. 1877	4 11 16	4. 1795	4 10 46	4. 1713	4 10 17	8
9	4. 1914	4 11 29	4. 1832	4 11 00	4. 1749	4 10 30	4. 1668	4 10 00	9
10	4. 1868	4 11 12	4. 1786	4 10 43	4. 1703	4 10 13	4. 1622	4 09 44	10
11	4. 1825	4 10 57	4. 1740	4 10 26	4. 1657	4 09 57	4. 1576	4 09 27	11
12	4. 1776	4 10 39	4. 1695	4 10 10	4. 1612	4 09 40	4. 1531	4 09 11	12
13	4. 1730	4 10 23	4. 1648	4 09 53	4. 1566	4 09 24	4. 1485	4 08 54	13
14	4. 1684	4 10 06	4. 1603	4 09 37	4. 1520	4 09 07	4. 1439	4 08 38	14
15	4. 1639	4 09 50	4. 1557	4 09 21	4 1475	4 08 51	4. 1394	4 08 22	15
16	4. 1593	4 09 33	4. 1512	4 09 04	4. 1430	4 08 35	4. 1348	4 08 05	16
17	4. 1548	4 09 17	4. 1467	4 08 48	4. 1385	4 08 18	4. 1304	4 07 49	17
18	4. 1503	4 09 01	4. 1422	4 08 32	4. 1340	4 08 02	4. 1259	4 07 33	18
19	4. 1457	4 08 45	4. 1376	4 08 15	4. 1295	4 07 46	4. 1214	4 07 17	19
20	4. 1412	4 08 28	4. 1331	4 07 59	4. 1250	4 07 30	4. 1169	4 07 01	20
21	4. 1367	4 08 12	4. 1287	4 07 43	4. 1206	4 07 14	4. 1125	4 06 45	21
22	4. 1323	4 07 56	4. 1242	4 07 27	4. 1160	4 06 58	4. 1080	4 06 29	22
23	4. 1278	4 07 40	4. 1197	4 07 11	4. 1116	4 06 42	4. 1035	4 06 13	23
24	4. 1234	4 07 24	4. 1153	4 06 55	4. 1072	4 06 26	4. 0991	4 05 57	24
25	4. 1189	4 07 08	4. 1108	4 06 39	4. 1027	4 06 10	4. 0947	4 05 41	25
26	4. 1145	4 06 52	4. 1064	4 06 23	4. 0983	4 05 54	4. 0903	4 05 25	26
27	4. 1100	4 06 36	4. 1019	4 06 07	4. 0938	4 05 37	4. 0858	4 05 09	27
28	4. 1056	4 06 20	4. 0975	4 05 51	4. 0894	4 05 22	4. 0814	4 04 53	28
29	4. 1011	4 06 04	4. 0931	4 05 35	4. 0850	4 05 06	4. 0770	4 04 37	29
30	4. 0967	4 05 48	4. 0887	4 05 19	4. 0806	4 04 50	4. 0727	4 04 22	30
31	4. 0923	4 05 32	4. 0843	4 05 03	4. 0763	4 04 35	4. 0683	4 04 06	31
32	4. 0879	4 05 16	4. 0799	4 04 48	4. 0719	4 04 19	4. 0639	4 03 50	32
33	4. 0835	4 05 01	4. 0756	4 04 32	4. 0675	4 04 03	4. 0595	4 03 34	33
34	4. 0792	4 04 45	4. 0712	4 04 16	4. 0631	4 03 47	4. 0551	4 03 18	34
35	4. 0748	4 04 29	4. 0669	4 04 01	4. 0588	4 03 31	4. 0509	4 03 03	35
36	4. 0705	4 04 14	4. 0625	4 03 45	4. 0545	4 03 16	4. 0465	4 02 47	36
37	4. 0661	4 03 58	4. 0582	4 03 30	4. 0501	4 03 00	4. 0422	4 02 32	37
38	4. 0618	4 03 42	4. 0539	4 03 14	4. 0458	4 02 45	4. 0379	4 02 16	38
39	4. 0574	4 03 27	4. 0495	4 02 58	4. 0415	4 02 29	4. 0335	4 02 01	39
40	4. 0531	4 03 11	4. 0452	4 02 43	4. 0372	4 02 14	4. 0293	4 01 45	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$7^h\ 48^m\ 00^s$		$7^h\ 48^m\ 30^s$		$7^h\ 49^m\ 00^s$		$7^h\ 49^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	4. 1954	4 11 43	4. 1871	4 11 14	4. 1787	4 10 43	4. 1704	4 10 13	1
2	4. 1906	4 11 26	4. 1824	4 10 57	4. 1740	4 10 26	4. 1657	4 09 57	2
3	4. 1860	4 11 10	4. 1777	4 10 40	4. 1694	4 10 10	4. 1611	4 09 40	3
4	4. 1814	4 10 53	4. 1731	4 10 23	4. 1647	4 09 53	4. 1565	4 09 23	4
5	4. 1768	4 10 36	4. 1685	4 10 06	4. 1602	4 09 37	4. 1519	4 09 07	5
6	4. 1722	4 10 20	4. 1639	4 09 50	4. 1555	4 09 20	4. 1474	4 08 51	6
7	4. 1675	4 10 03	4. 1593	4 09 33	4. 1510	4 09 04	4. 1428	4 08 34	7
8	4. 1629	4 09 46	4. 1547	4 09 17	4. 1464	4 08 47	4. 1382	4 08 18	8
9	4. 1585	4 09 30	4. 1502	4 09 01	4. 1419	4 08 31	4. 1337	4 08 01	9
10	4. 1538	4 09 13	4. 1456	4 08 44	4. 1373	4 08 14	4. 1292	4 07 45	10
11	4. 1493	4 08 57	4. 1410	4 08 28	4. 1327	4 07 58	4. 1244	4 07 28	11
12	4. 1448	4 08 41	4. 1365	4 08 11	4. 1283	4 07 42	4. 1201	4 07 12	12
13	4. 1402	4 08 25	4. 1320	4 07 55	4. 1237	4 07 25	4. 1155	4 06 56	13
14	4. 1356	4 08 08	4. 1275	4 07 39	4. 1192	4 07 09	4. 1111	4 06 40	14
15	4. 1311	4 07 52	4. 1230	4 07 23	4. 1147	4 06 53	4. 1066	4 06 24	15
16	4. 1266	4 07 36	4. 1184	4 07 06	4. 1102	4 06 37	4. 1020	4 06 07	16
17	4. 1221	4 07 20	4. 1140	4 06 50	4. 1057	4 06 21	4. 0976	4 05 51	17
18	4. 1176	4 07 03	4. 1095	4 06 34	4. 1013	4 06 05	4. 0932	4 05 36	18
19	4. 1131	4 06 47	4. 1050	4 06 18	4. 0967	4 05 48	4. 0886	4 05 19	19
20	4. 1086	4 06 31	4. 1005	4 06 02	4. 0923	4 05 32	4. 0842	4 05 03	20
21	4. 1042	4 06 15	4. 0961	4 05 46	4. 0879	4 05 16	4. 0798	4 04 47	21
22	4. 0998	4 05 59	4. 0916	4 05 30	4. 0835	4 05 01	4. 0754	4 04 31	22
23	4. 0954	4 05 43	4. 0873	4 05 14	4. 0791	4 04 45	4. 0710	4 04 16	23
24	4. 0909	4 05 27	4. 0828	4 04 58	4. 0746	4 04 29	4. 0666	4 04 00	24
25	4. 0865	4 05 11	4. 0784	4 04 42	4. 0703	4 04 13	4. 0622	4 03 44	25
26	4. 0820	4 04 55	4. 0740	4 04 26	4. 0658	4 03 57	4. 0578	4 03 28	26
27	4. 0776	4 04 39	4. 0696	4 04 11	4. 0615	4 03 41	4. 0534	4 03 12	27
28	4. 0733	4 04 24	4. 0652	4 03 55	4. 0570	4 03 25	4. 0490	4 02 56	28
29	4. 0688	4 04 07	4. 0608	4 03 39	4. 0526	4 03 09	4. 0446	4 02 41	29
30	4. 0645	4 03 52	4. 0565	4 03 23	4. 0484	4 02 54	4. 0404	4 02 25	30
31	4. 0601	4 03 36	4. 0521	4 03 08	4. 0440	4 02 38	4. 0360	4 02 10	31
32	4. 0557	4 03 21	4. 0477	4 02 52	4. 0396	4 02 23	4. 0316	4 01 54	32
33	4. 0515	4 03 05	4. 0435	4 02 37	4. 0354	4 02 07	4. 0274	4 01 39	33
34	4. 0471	4 02 50	4. 0391	4 02 21	4. 0310	4 01 52	4. 0230	4 01 23	34
35	4. 0428	4 02 34	4. 0348	4 02 05	4. 0267	4 01 36	4. 0187	4 01 07	35
36	4. 0384	4 02 18	4. 0304	4 01 49	4. 0224	4 01 21	4. 0144	4 00 52	36
37	4. 0341	4 02 03	4. 0262	4 01 34	4. 0181	4 01 05	4. 0102	4 00 37	37
38	4. 0298	4 01 47	4. 0219	4 01 19	4. 0138	4 00 49	4. 0059	4 00 21	38
39	4. 0255	4 01 32	4. 0175	4 01 03	4. 0095	4 00 34	4. 0015	4 00 05	39
40	4. 0213	4 01 17	4. 0133	4 00 48	4. 0053	4 00 19	3. 9974	3 59 51	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$7^h\ 50^m\ 00^s$		$7^h\ 50^m\ 30^s$		$7^h\ 51^m\ 00^s$		$7^h\ 51^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	4. 1621	4 09 44	4. 1537	4 09 13	4. 1455	4 08 44	4. 1371	4 08 14	1
2	4. 1574	4 09 27	4. 1491	4 08 57	4. 1408	4 08 27	4. 1325	4 07 57	2
3	4. 1528	4 09 10	4. 1445	4 08 40	4. 1362	4 08 10	4. 1279	4 07 40	3
4	4. 1482	4 08 54	4. 1399	4 08 24	4. 1316	4 07 54	4. 1234	4 07 24	4
5	4. 1436	4 08 37	4. 1353	4 08 07	4. 1271	4 07 38	4. 1188	4 07 07	5
6	4. 1390	4 08 20	4. 1307	4 07 51	4. 1225	4 07 21	4. 1143	4 06 51	6
7	4. 1345	4 08 04	4. 1262	4 07 34	4. 1179	4 07 04	4. 1097	4 06 35	7
8	4. 1299	4 07 48	4. 1216	4 07 18	4. 1134	4 06 48	4. 1052	4 06 19	8
9	4. 1255	4 07 32	4. 1172	4 07 02	4. 1089	4 06 32	4. 1007	4 06 03	9
10	4. 1209	4 07 15	4. 1126	4 06 45	4. 1044	4 06 16	4. 0962	4 05 46	10
11	4. 1163	4 06 59	4 1081	4 06 29	4. 0999	4 06 00	4. 0916	4 05 30	11
12	4. 1119	4 06 43	4. 1036	4 06 13	4. 0955	4 05 44	4. 0873	4 05 14	12
13	4. 1074	4 06 27	4. 0991	4 05 57	4. 0909	4 05 27	4. 0827	4 04 58	13
14	4. 1028	4 06 10	4. 0946	4 05 41	4. 0864	4 05 11	4. 0782	4 04 42	14
15	4. 0984	4 05 54	4. 0902	4 05 25	4. 0820	4 04 55	4. 0738	4 04 25	15
16	4. 0938	4 05 37	4. 0856	4 05 08	4. 0775	4 04 39	4. 0693	4 04 09	16
17	4. 0894	4 05 22	4. 0812	4 04 52	4. 0731	4 04 23	4. 0649	4 03 54	17
18	4. 0850	4 05 06	4. 0768	4 04 36	4. 0686	4 04 07	4. 0603	4 03 37	18
19	4. 0805	4 04 50	4. 0723	4 04 20	4. 0642	4 03 51	4. 0560	4 03 22	19
20	4. 0761	4 04 34	4. 0679	4 04 04	4. 0597	4 03 35	4. 0516	4 03 06	20
21	4. 0716	4 04 18	4. 0635	4 03 49	4. 0554	4 03 19	4. 0473	4 02 50	21
22	4. 0673	4 04 02	4. 0591	4 03 33	4. 0510	4 03 04	4. 0429	4 02 34	22
23	4. 0628	4 03 46	4. 0547	4 03 17	4. 0466	4 02 48	4. 0385	4 02 18	23
24	4. 0585	4 03 30	4. 0503	4 03 01	4. 0422	4 02 32	4. 0341	4 02 03	24
25	4. 0541	4 03 15	4. 0459	4 02 45	4. 0378	4 02 16	4. 0297	4 01 47	25
26	4. 0496	4 02 59	4. 0415	4 02 29	4. 0335	4 02 01	4. 0254	4 01 31	26
27	4. 0453	4 02 43	4. 0372	4 02 14	4. 0291	4 01 45	4. 0211	4 01 16	27
28	4. 0409	4 02 27	4. 0328	4 01 58	4. 0247	4 01 29	4. 0167	4 01 00	28
29	4. 0365	4 02 11	4. 0285	4 01 42	4. 0204	4 01 13	4. 0124	4 00 45	29
30	4. 0323	4 01 56	4. 0242	4 01 27	4. 0162	4 00 58	4. 0081	4 00 29	30
31	4. 0279	4 01 40	4. 0198	4 01 11	4. 0118	4 00 42	4. 0038	4 00 13	31
32	4. 0235	4 01 25	4. 0155	4 00 56	4. 0075	4 00 27	3. 9995	3 59 58	32
33	4. 0193	4 01 09	4. 0113	4 00 41	4. 0032	4 00 12	3. 9952	3 59 43	33
34	4. 0149	4 00 54	4. 0069	4 00 25	3. 9989	3 59 56	3. 9909	3 59 27	34
35	4. 0107	4 00 39	4. 0026	4 00 09	3. 9946	3 59 41	3. 9866	3 59 12	35
36	4. 0064	4 00 23	3. 9984	3 59 54	3. 9904	3 59 25	3. 9824	3 58 57	36
37	4. 0021	4 00 08	3. 9941	3 59 39	3. 9861	3 59 10	3. 9782	3 58 42	37
38	3. 9979	3 59 52	3. 9899	3 59 24	3. 9819	3 58 55	3. 9739	3 58 26	38
39	3. 9935	3 59 37	3. 9855	3 59 08	3. 9776	3 58 39	3. 9696	3 58 11	39
40	3. 9894	3 59 22	3. 9814	3 58 53	3. 9734	3 58 24	3. 9655	3 57 56	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$7^h\ 52^m\ 00^s$		$7^h\ 52^m\ 30^s$		$7^h\ 53^m\ 00^s$		$7^h\ 53^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	4. 1288	4 07 43	4. 1205	4 07 14	4. 1122	4 06 44	4. 1038	4 06 13	1
2	4. 1241	4 07 27	4. 1158	4 06 57	4. 1075	4 06 27	4. 0992	4 05 57	2
3	4. 1195	4 07 10	4. 1113	4 06 41	4. 1030	4 06 11	4. 0947	4 05 41	3
4	4. 1150	4 06 54	4. 1068	4 06 24	4. 0985	4 05 54	4. 0902	4 05 25	4
5	4. 1105	4 06 38	4. 1022	4 06 08	4. 0939	4 05 38	4. 0856	4 05 08	5
6	4. 1059	4 06 21	4. 0977	4 05 52	4. 0894	4 05 22	4. 0811	4 04 52	6
7	4. 1014	4 06 05	4. 0932	4 05 36	4. 0849	4 05 06	4. 0766	4 04 36	7
8	4. 0968	4 05 48	4. 0886	4 05 19	4. 0804	4 04 49	4. 0721	4 04 20	8
9	4. 0924	4 05 33	4. 0842	4 05 03	4. 0760	4 04 34	4. 0677	4 04 04	9
10	4. 0879	4 05 16	4. 0797	4 04 47	4. 0715	4 04 17	4. 0632	4 03 48	10
11	4. 0834	4 05 00	4. 0752	4 04 31	4. 0670	4 04 01	4. 0587	4 03 31	11
12	4. 0790	4 04 44	4. 0708	4 04 15	4. 0625	4 03 45	4. 0544	4 03 16	12
13	4. 0745	4 04 28	4. 0663	4 03 59	4. 0581	4 03 29	4. 0498	4 02 59	13
14	4. 0700	4 04 12	4. 0618	4 03 42	4. 0536	4 03 13	4. 0454	4 02 43	14
15	4. 0655	4 03 56	4. 0574	4 03 27	4. 0492	4 02 57	4. 0410	4 02 28	15
16	4. 0611	4 03 40	4. 0529	4 03 10	4. 0447	4 02 41	4. 0365	4 02 11	16
17	4. 0566	4 03 24	4. 0485	4 02 54	4. 0404	4 02 25	4. 0322	4 01 56	17
18	4. 0523	4 03 08	4. 0442	4 02 39	4. 0360	4 02 10	4. 0278	4 01 40	18
19	4. 0478	4 02 52	4. 0397	4 02 23	4. 0315	4 01 53	4. 0234	4 01 24	19
20	4. 0435	4 02 37	4. 0354	4 02 07	4. 0272	4 01 38	4. 0190	4 01 08	20
21	4. 0391	4 02 21	4. 0310	4 01 52	4. 0228	4 01 22	4. 0146	4 00 53	21
22	4. 0347	4 02 05	4. 0266	4 01 36	4. 0185	4 01 06	4. 0104	4 00 37	22
23	4. 0303	4 01 49	4. 0222	4 01 20	4. 0141	4 00 51	4. 0060	4 00 22	23
24	4. 0260	4 01 34	4. 0179	4 01 04	4. 0098	4 00 35	4. 0016	4 00 06	24
25	4. 0216	4 01 18	4. 0135	4 00 49	4. 0055	4 00 20	3. 9974	3 59 51	25
26	4. 0173	4 01 02	4. 0092	4 00 33	4. 0011	4 00 04	3. 9930	3 59 35	26
27	4. 0129	4 00 46	4. 0049	4 00 18	3. 9968	3 59 48	3. 9887	3 59 19	27
28	4. 0085	4 00 30	4. 0005	4 00 02	3. 9925	3 59 33	3. 9844	3 59 04	28
29	4. 0043	4 00 15	3. 9962	3 59 46	3. 9881	3 59 17	3. 9801	3 58 48	29
30	4. 0000	4 00 00	3. 9920	3 59 31	3. 9839	3 59 02	3. 9758	3 58 33	30
31	3. 9956	3 59 44	3. 9876	3 59 15	3. 9796	3 58 47	3. 9715	3 58 17	31
32	3. 9914	3 59 29	3. 9834	3 59 00	3. 9753	3 58 31	3. 9673	3 58 02	32
33	3. 9871	3 59 14	3. 9792	3 58 45	3. 9711	3 58 16	3. 9631	3 57 47	33
34	3. 9828	3 58 58	3. 9748	3 58 29	3. 9668	3 58 00	3. 9587	3 57 31	34
35	3. 9784	3 58 42	3. 9706	3 58 14	3. 9625	3 57 45	3. 9545	3 57 16	35
36	3. 9743	3 58 27	3. 9664	3 57 59	3. 9583	3 57 30	3. 9503	3 57 01	36
37	3. 9701	3 58 12	3. 9622	3 57 44	3. 9541	3 57 15	3. 9461	3 56 46	37
38	3. 9659	3 57 57	3. 9579	3 57 28	3. 9499	3 57 00	3. 9419	3 56 31	38
39	3. 9616	3 57 42	3. 9536	3 57 13	3. 9456	3 56 44	3. 9376	3 56 16	39
40	3. 9574	3 57 27	3. 9495	3 56 58	3. 9415	3 56 29	3. 9335	3 56 01	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$7^h\ 54^m\ 00^s$		$7^h\ 54^m\ 30^s$		$7^h\ 55^m\ 00^s$		$7^h\ 55^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	4. 0955	4 05 44	4. 0872	4 05 14	4. 0789	4 04 44	4. 0705	4 04 14	1
2	4. 0909	4 05 27	4. 0825	4 04 57	4. 0743	4 04 27	4. 0659	4 03 57	2
3	4. 0864	4 05 11	4. 0780	4 04 41	4. 0698	4 04 11	4. 0615	4 03 41	3
4	4. 0819	4 04 55	4. 0735	4 04 25	4. 0653	4 03 55	4. 0569	4 03 25	4
5	4. 0774	4 04 39	4. 0690	4 04 08	4. 0608	4 03 39	4. 0525	4 03 09	5
6	4. 0729	4 04 22	4. 0645	4 03 52	4. 0563	4 03 23	4. 0480	4 02 53	6
7	4. 0684	4 04 06	4. 0600	4 03 36	4. 0518	4 03 06	4. 0435	4 02 37	7
8	4. 0639	4 03 50	4. 0555	4 03 20	4. 0474	4 02 51	4. 0391	4 02 21	8
9	4. 0595	4 03 34	4. 0512	4 03 04	4. 0430	4 02 35	4. 0347	4 02 05	9
10	4. 0550	4 03 18	4. 0467	4 02 48	4. 0385	4 02 18	4. 0302	4 01 49	10
11	4. 0505	4 03 02	4. 0422	4 02 32	4. 0340	4 02 02	4. 0258	4 01 33	11
12	4. 0461	4 02 46	4. 0378	4 02 16	4. 0296	4 01 47	4. 0215	4 01 17	12
13	4. 0416	4 02 30	4. 0334	4 02 00	4. 0252	4 01 31	4. 0170	4 01 01	13
14	4. 0372	4 02 14	4. 0289	4 01 44	4. 0208	4 01 15	4. 0125	4 00 45	14
15	4. 0328	4 01 58	4. 0245	4 01 28	4. 0165	4 00 59	4. 0082	4 00 30	15
16	4. 0284	4 01 42	4. 0201	4 01 12	4. 0120	4 00 43	4. 0038	4 00 13	16
17	4. 0240	4 01 26	4. 0158	4 00 57	4. 0076	4 00 27	3. 9995	3 59 58	17
18	4. 0196	4 01 11	4. 0115	4 00 41	4. 0033	4 00 12	3. 9951	3 59 42	18
19	4. 0152	4 00 55	4. 0070	4 00 25	3. 9989	3 59 56	3. 9907	3 59 27	19
20	4. 0109	4 00 39	4. 0026	4 00 09	3. 9945	3 59 40	3. 9864	3 59 11	20
21	4. 0065	4 00 23	3. 9984	3 59 54	3. 9903	3 59 25	3. 9821	3 58 56	21
22	4. 0022	4 00 08	3. 9940	3 59 38	3. 9859	3 59 09	3. 9778	3 58 40	22
23	3. 9979	3 59 52	3. 9897	3 59 23	3. 9816	3 58 54	3. 9735	3 58 25	23
24	3. 9935	3 59 37	3. 9854	3 59 07	3. 9773	3 58 38	3. 9692	3 58 09	24
25	3. 9893	3 59 21	3. 9811	3 58 52	3. 9730	3 58 23	3. 9649	3 57 54	25
26	3. 9849	3 59 06	3. 9767	3 58 36	3. 9687	3 58 07	3. 9606	3 57 38	26
27	3. 9806	3 58 50	3. 9725	3 58 21	3. 9645	3 57 52	3. 9563	3 57 23	27
28	3. 9763	3 58 35	3. 9682	3 58 06	3. 9601	3 57 36	3. 9520	3 57 07	28
29	3. 9721	3 58 20	3. 9639	3 57 50	3. 9558	3 57 21	3. 9477	3 56 52	29
30	3. 9678	3 58 04	3. 9596	3 57 35	3. 9516	3 57 06	3. 9435	3 56 37	30
31	3. 9635	3 57 49	3. 9554	3 57 19	3. 9474	3 56 51	3. 9393	3 56 21	31
32	3. 9592	3 57 33	3. 9511	3 57 04	3. 9431	3 56 35	3. 9351	3 56 06	32
33	3. 9550	3 57 18	3. 9469	3 56 49	3. 9389	3 56 20	3. 9309	3 55 51	33
34	3. 9507	3 57 03	3. 9426	3 56 33	3. 9347	3 56 05	3. 9266	3 55 36	34
35	3. 9465	3 56 47	3. 9385	3 56 18	3. 9305	3 55 50	3. 9225	3 55 21	35
36	3. 9423	3 56 32	3. 9343	3 56 03	3. 9263	3 55 35	3. 9183	3 55 06	36
37	3. 9381	3 56 17	3. 9301	3 55 48	3. 9221	3 55 20	3. 9141	3 54 51	37
38	3. 9340	3 56 02	3. 9259	3 55 33	3. 9180	3 55 05	3. 9099	3 54 36	38
39	3. 9297	3 55 47	3. 9216	3 55 18	3. 9137	3 54 49	3. 9057	3 54 21	39
40	3. 9255	3 55 32	3. 9175	3 55 03	3. 9095	3 54 34	3. 9015	3 54 05	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$7^h\ 56^m\ 00^s$		$7^h\ 56^m\ 30^s$		$7^h\ 57^m\ 00^s$		$7^h\ 57^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	4.0622	4 03 44	4.0539	4 03 14	4.0455	4 02 44	4.0372	4 02 14	1
2	4.0576	4 03 27	4.0493	4 02 57	4.0410	4 02 28	4.0326	4 01 57	2
3	4.0531	4 03 12	4.0448	4 02 41	4.0365	4 02 11	4.0282	4 01 42	3
4	4.0486	4 02 55	4.0404	4 02 25	4.0321	4 01 56	4.0237	4 01 25	4
5	4.0442	4 02 39	4.0359	4 02 09	4.0276	4 01 39	4.0193	4 01 09	5
6	4.0397	4 02 23	4.0315	4 01 53	4.0232	4 01 24	4.0148	4 00 53	6
7	4.0353	4 02 07	4.0270	4 01 37	4.0187	4 01 07	4.0105	4 00 38	7
8	4.0308	4 01 51	4.0225	4 01 21	4.0143	4 00 51	4.0060	4 00 22	8
9	4.0265	4 01 35	4.0182	4 01 06	4.0100	4 00 36	4.0016	4 00 06	9
10	4.0220	4 01 19	4.0137	4 00 49	4.0056	4 00 20	3.9973	3 59 50	10
11	4.0175	4 01 03	4.0093	4 00 33	4.0011	4 00 04	3.9928	3 59 34	11
12	4.0132	4 00 48	4.0050	4 00 18	3.9968	3 59 48	3.9885	3 59 18	12
13	4.0087	4 00 31	4.0005	4 00 02	3.9924	3 59 33	3.9841	3 59 03	13
14	4.0044	4 00 16	3.9961	3 59 46	3.9879	3 59 16	3.9797	3 58 47	14
15	4.0000	4 00 00	3.9918	3 59 30	3.9836	3 59 01	3.9754	3 58 31	15
16	3.9955	3 59 44	3.9874	3 59 15	3.9793	3 58 45	3.9710	3 58 16	16
17	3.9913	3 59 29	3.9831	3 58 59	3.9749	3 58 30	3.9667	3 58 00	17
18	3.9869	3 59 13	3.9788	3 58 43	3.9706	3 58 14	3.9624	3 57 45	18
19	3.9825	3 58 57	3.9744	3 58 28	3.9663	3 57 59	3.9580	3 57 29	19
20	3.9783	3 58 42	3.9701	3 58 12	3.9620	3 57 43	3.9537	3 57 13	20
21	3.9739	3 58 26	3.9658	3 57 57	3.9576	3 57 27	3.9495	3 56 58	21
22	3.9696	3 58 11	3.9615	3 57 41	3.9534	3 57 12	3.9452	3 56 43	22
23	3.9654	3 57 55	3.9572	3 57 26	3.9491	3 56 57	3.9409	3 56 27	23
24	3.9611	3 57 40	3.9529	3 57 10	3.9448	3 56 41	3.9366	3 56 12	24
25	3.9567	3 57 24	3.9486	3 56 55	3.9405	3 56 26	3.9325	3 55 57	25
26	3.9525	3 57 09	3.9444	3 56 40	3.9363	3 56 11	3.0282	3 55 42	26
27	3.9482	3 56 54	3.9401	3 56 24	3.9321	3 55 56	3.9239	3 55 26	27
28	3.9439	3 56 38	3.9358	3 56 09	3.9278	3 55 40	3.9196	3 55 11	28
29	3.9396	3 56 23	3.9316	3 55 54	3.9235	3 55 25	3.9155	3 54 56	29
30	3.9355	3 56 08	3.9275	3 55 39	3.9194	3 55 10	3.9113	3 54 41	30
31	3.9313	3 55 53	3.9232	3 55 24	3.9152	3 54 55	3.9071	3 54 26	31
32	3.9270	3 55 37	3.9189	3 55 08	3.9109	3 54 39	3.9028	3 54 10	32
33	3.9228	3 55 22	3.9148	3 54 53	3.9068	3 54 24	3.8987	3 53 55	33
34	3.9186	3 55 07	3.9105	3 54 38	3.9025	3 54 09	3.8945	3 53 40	34
35	3.9145	3 54 52	3.9065	3 54 23	3.8985	3 53 54	3.8904	3 53 25	35
36	3.9102	3 54 37	3.9022	3 54 08	3.8942	3 53 39	3.8862	3 53 10	36
37	3.9061	3 54 22	3.8981	3 53 53	3.8901	3 53 24	3.8820	3 52 55	37
38	3.9019	3 54 07	3.8939	3 53 38	3.8860	3 53 10	3.8779	3 52 40	38
39	3.8977	3 53 52	3.8897	3 53 23	3.8817	3 52 54	3.8737	3 52 25	39
40	3.8936	3 53 37	3.8856	3 53 08	3.8776	3 52 39	3.8697	3 52 11	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$7^h\ 58^m\ 00^s$		$7^h\ 58^m\ 30^s$		$7^h\ 59^m\ 00^s$		$7^h\ 59^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	4.0289	4 01 44	4.0206	4 01 14	4.0123	4 00 44	4.0040	4 00 14	1
2	4.0244	4 01 28	4.0161	4 00 58	4.0077	4 00 28	3.9995	3 59 58	2
3	4.0199	4 01 12	4.0116	4 00 42	4.0033	4 00 12	3.9950	3 59 42	3
4	4.0155	4 00 56	4.0072	4 00 26	3.9989	3 59 56	3.9906	3 59 26	4
5	4.0111	4 00 40	4.0027	4 00 10	3.9945	3 59 40	3.9862	3 59 10	5
6	4.0066	4 00 24	3.9984	3 59 54	3.9901	3 59 24	3.9818	3 58 54	6
7	4.0022	4 00 08	3.9939	3 59 38	3.9856	3 59 08	3.9774	3 58 39	7
8	3.9978	3 59 52	3.9895	3 59 22	3.9813	3 58 53	3.9730	3 58 23	8
9	3.9935	3 59 37	3.9852	3 59 07	3.9769	3 58 37	3.9687	3 58 07	9
10	3.9891	3 59 21	3.9808	3 58 51	3.9725	3 58 21	3.9644	3 57 52	10
11	3.9846	3 59 05	3.9764	3 58 35	3.9682	3 58 06	3.9599	3 57 36	11
12	3.9804	3 58 49	3.9721	3 58 20	3.9639	3 57 50	3.9556	3 57 20	12
13	3.9759	3 58 33	3.9677	3 58 04	3.9595	3 57 34	3.9513	3 57 05	13
14	3.9715	3 58 17	3.9634	3 57 48	3.9551	3 57 18	3.9469	3 56 49	14
15	3.9673	3 58 02	3.9590	3 57 32	3.9508	3 57 03	3.9426	3 56 33	15
16	3.9629	3 57 46	3.9546	3 57 17	3.9465	3 56 47	3.9383	3 56 18	16
17	3.9585	3 57 30	3.9504	3 57 01	3.9420	3 56 31	3.9341	3 56 03	17
18	3.9543	3 57 15	3.9461	3 56 46	3.9379	3 56 16	3.9298	3 55 47	18
19	3.9499	3 57 00	3.9417	3 56 30	3.9336	3 56 01	3.9255	3 55 32	19
20	3.9456	3 56 44	3.9374	3 56 15	3.9294	3 55 46	3.9212	3 55 16	20
21	3.9414	3 56 29	3.9333	3 56 00	3.9251	3 55 30	3.9170	3 55 01	21
22	3.9371	3 56 14	3.9290	3 55 44	3.9208	3 55 15	3.9127	3 54 46	22
23	3.9330	3 55 59	3.9247	3 55 29	3.9166	3 55 00	3.9085	3 54 30	23
24	3.9286	3 55 46	3.9205	3 55 14	3.9124	3 54 45	3.9043	3 54 15	24
25	3.9244	3 55 28	3.9163	3 54 59	3.9082	3 54 30	3.9001	3 54 00	25
26	3.9201	3 55 12	3.9120	3 54 43	3.9039	3 54 14	3.8958	3 53 45	26
27	3.9159	3 54 57	3.9078	3 54 28	3.8997	3 53 59	3.8916	3 53 30	27
28	3.9116	3 54 42	3.9035	3 54 13	3.8955	3 53 44	3.8874	3 53 15	28
29	3.9075	3 54 27	3.8994	3 53 58	3.8913	3 53 29	3.8832	3 53 00	29
30	3.9033	3 54 12	3.8952	3 53 43	3.8871	3 53 14	3.8791	3 52 44	30
31	3.8991	3 53 56	3.8910	3 53 28	3.8829	3 52 58	3.8749	3 52 30	31
32	3.8948	3 53 41	3.8867	3 53 12	3.8787	3 52 43	3.8707	3 52 15	32
33	3.8907	3 53 27	3.8826	3 52 57	3.8746	3 52 29	3.8666	3 52 00	33
34	3.8865	3 53 11	3.8785	3 52 42	3.8705	3 52 14	3.8625	3 51 45	34
35	3.8824	3 52 57	3.8744	3 52 28	3.8664	3 51 59	3.8584	3 51 30	35
36	3.8782	3 52 42	3.8702	3 52 13	3.8621	3 51 44	3.8542	3 51 15	36
37	3.8741	3 52 27	3.8661	3 51 58	3.8581	3 51 29	3.8501	3 51 00	37
38	3.8700	3 52 12	3.8620	3 51 43	3.8540	3 51 14	3.8460	3 50 46	38
39	3.8658	3 51 57	3.8578	3 51 28	3.8498	3 50 59	3.8418	3 50 30	39
40	3.8617	3 51 42	3.8537	3 51 13	3.8457	3 50 45	3.8378	3 50 16	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$8^h\ 00^m\ 00^s$		$8^h\ 00^m\ 30^s$		$8^h\ 01^m\ 00^s$		$8^h\ 01^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	3·9955	3 59 44	3·9873	3 59 14	3·9790	3 58 44	3·9706	3 58 14	1
2	3·9911	3 59 28	3·9828	3 58 58	3·9745	3 58 28	3·9662	3 57 58	2
3	3·9866	3 59 12	3·9785	3 58 42	3·9701	3 58 12	3·9618	3 57 42	3
4	3·9823	3 58 56	3·9740	3 58 26	3·9658	3 57 57	3·9574	3 57 27	4
5	3·9779	3 58 40	3·9696	3 58 11	3·9614	3 57 41	3·9530	3 57 11	5
6	3·9735	3 58 25	3·9653	3 57 55	3·9569	3 57 25	3·9486	3 56 55	6
7	3·9691	3 58 09	3·9609	3 57 39	3·9525	3 57 09	3·9443	3 56 39	7
8	3·9647	3 57 53	3·9565	3 57 23	3·9482	3 56 54	3·9399	3 56 24	8
9	3·9604	3 57 37	3·9522	3 57 08	3·9439	3 56 38	3·9357	3 56 09	9
10	3·9560	3 57 22	3·9478	3 56 52	3·9395	3 56 22	3·9314	3 55 53	10
11	3·9516	3 57 06	3·9435	3 56 37	3·9353	3 56 07	3·9270	3 55 37	11
12	3·9474	3 56 51	3·9392	3 56 21	3·9310	3 55 52	3·9227	3 55 22	12
13	3·9430	3 56 35	3·9349	3 56 06	3·9266	3 55 36	3·9184	3 55 06	13
14	3·9386	3 56 19	3·9305	3 55 50	3·9223	3 55 20	3·9141	3 54 51	14
15	3·9345	3 56 04	3·9263	3 55 35	3·9181	3 55 05	3·9098	3 54 35	15
16	3·9301	3 55 48	3·9219	3 55 19	3·9137	3 54 49	3·9055	3 54 20	16
17	3·9258	3 55 33	3·9177	3 55 04	3·9095	3 54 34	3·9013	3 54 05	17
18	3·9215	3 55 17	3·9135	3 54 49	3·9053	3 54 19	3·8971	3 53 50	18
19	3·9173	3 55 02	3·9091	3 54 33	3·9009	3 54 03	3·8928	3 53 34	19
20	3·9130	3 54 47	3·9049	3 54 18	3·8967	3 53 48	3·8886	3 53 19	20
21	3·9087	3 54 31	3·9007	3 54 03	3·8925	3 53 33	3·8844	3 53 04	21
22	3·9045	3 54 16	3·8965	3 53 47	3·8883	3 53 18	3·8802	3 52 49	22
23	3·9003	3 54 01	3·8923	3 53 32	3·8841	3 53 03	3·8760	3 52 34	23
24	3·8961	3 53 46	3·8880	3 53 17	3·8800	3 52 48	3·8718	3 52 18	24
25	3·8919	3 53 31	3·8838	3 53 01	3·8759	3 52 33	3·8676	3 52 03	25
26	3·8877	3 53 16	3·8796	3 52 47	3·8715	3 52 17	3·8634	3 51 48	26
27	3·8835	3 53 01	3·8755	3 52 32	3·8673	3 52 02	3·8592	3 51 33	27
28	3·8793	3 52 45	3·8713	3 52 17	3·8632	3 51 48	3·8551	3 51 18	28
29	3·8751	3 52 30	3·8671	3 52 02	3·8590	3 51 32	3·8509	3 51 03	29
30	3·8710	3 52 16	3·8630	3 51 47	3·8549	3 51 18	3·8468	3 50 48	30
31	3·8668	3 52 00	3·8588	3 51 31	3·8507	3 51 03	3·8426	3 50 33	31
32	3·8626	3 51 45	3·8546	3 51 17	3·8465	3 50 47	3·8385	3 50 18	32
33	3·8585	3 51 30	3·8505	3 51 02	3·8425	3 50 33	3·8344	3 50 04	33
34	3·8544	3 51 16	3·8464	3 50 47	3·8383	3 50 18	3·8303	3 49 49	34
35	3·8503	3 51 01	3·8423	3 50 32	3·8342	3 50 03	3·8262	3 49 34	35
36	3·8461	3 50 46	3·8382	3 50 18	3·8301	3 49 48	3·8221	3 49 20	36
37	3·8420	3 50 31	3·8341	3 50 03	3·8261	3 49 34	3·8180	3 49 05	37
38	3·8380	3 50 17	3·8300	3 49 48	3·8220	3 49 19	3·8140	3 48 51	38
39	3·8338	3 50 01	3·8259	3 49 33	3·8178	3 49 04	3·8099	3 48 36	39
40	3·8297	3 49 47	3·8218	3 49 18	3·8138	3 48 49	3·8058	3 48 21	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$8^h\ 02^m\ 00^s$		$8^h\ 02^m\ 30^s$		$8^h\ 03^m\ 00^s$		$8^h\ 03^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	3·9624	3 57 45	3·9539	3 57 14	3·9456	3 56 44	3·9373	3 56 14	1
2	3·9578	3 57 28	3·9495	3 56 58	3·9412	3 56 28	3·9329	3 55 58	2
3	3·9535	3 57 13	3·9451	3 56 42	3·9368	3 56 12	3·9285	3 55 42	3
4	3·9491	3 56 57	3·9407	3 56 27	3·9325	3 55 57	3·9242	3 55 27	4
5	3·9447	3 56 41	3·9364	3 56 11	3·9282	3 55 42	3·9198	3 55 11	5
6	3·9404	3 56 25	3·9321	3 55 56	3·9238	3 55 25	3·9155	3 54 56	6
7	3·9360	3 56 10	3·9277	3 55 40	3·9195	3 55 10	3·9112	3 54 40	7
8	3·9317	3 55 54	3·9234	3 55 24	3·9152	3 54 55	3·9068	3 54 24	8
9	3·9275	3 55 39	3·9191	3 55 09	3·9109	3 54 39	3·9026	3 54 09	9
10	3·9231	3 55 23	3·9148	3 54 53	3·9066	3 54 24	3·8984	3 53 54	10
11	3·9187	3 55 07	3·9105	3 54 38	3·9023	3 54 08	3·8940	3 53 38	11
12	3·9145	3 54 52	3·9063	3 54 23	3·8981	3 53 53	3·8898	3 53 23	12
13	3·9102	3 54 37	3·9019	3 54 07	3·8938	3 53 37	3·8855	3 53 08	13
14	3·9059	3 54 21	3·8976	3 53 51	3·8895	3 53 22	3·8813	3 52 53	14
15	3·9016	3 54 06	3·8934	3 53 36	3·8853	3 53 07	3·8770	3 52 37	15
16	3·8974	3 53 51	3·8891	3 53 21	3·8810	3 52 52	3·8727	3 52 22	16
17	3·8932	3 53 36	3·8849	3 53 06	3·8767	3 52 36	3·8685	3 52 06	17
18	3·8889	3 53 20	3·8807	3 52 51	3·8725	3 52 21	3·8644	3 51 52	18
19	3·8846	3 53 05	3·8765	3 52 35	3·8683	3 52 06	3·8601	3 51 36	19
20	3·8805	3 52 50	3·8722	3 52 20	3·8641	3 51 51	3·8559	3 51 21	20
21	3·8763	3 52 35	3·8680	3 52 05	3·8599	3 51 36	3·8517	3 51 06	21
22	3·8720	3 52 19	3·8638	3 51 49	3·8558	3 51 21	3·8476	3 50 51	22
23	3·8678	3 52 04	3·8597	3 51 35	3·8516	3 51 06	3·8435	3 50 37	23
24	3·8637	3 51 49	3·8555	3 51 20	3·8474	3 50 51	3·8393	3 50 21	24
25	3·8595	3 51 34	3·8513	3 51 05	3·8433	3 50 36	3·8351	3 50 06	25
26	3·8553	3 51 19	3·8473	3 50 50	3·8391	3 50 21	3·8310	3 49 52	26
27	3·8512	3 51 04	3·8430	3 50 35	3·8349	3 50 06	3·8268	3 49 36	27
28	3·8470	3 50 49	3·8388	3 50 19	3·8308	3 49 51	3·8227	3 49 22	28
29	3·8428	3 50 34	3·8347	3 50 05	3·8267	3 49 36	3·8185	3 49 06	29
30	3·8387	3 50 19	3·8306	3 49 50	3·8226	3 49 21	3·8145	3 48 52	30
31	3·8346	3 50 05	3·8265	3 49 35	3·8185	3 49 06	3·8104	3 48 37	31
32	3·8305	3 49 50	3·8224	3 49 21	3·8144	3 48 52	3·8063	3 48 23	32
33	3·8264	3 49 35	3·8183	3 49 06	3·8103	3 48 37	3·8022	3 48 08	33
34	3·8223	3 49 20	3·8142	3 48 51	3·8062	3 48 22	3·7982	3 47 54	34
35	3·8182	3 49 05	3·8102	3 48 37	3·8022	3 48 08	3·7941	3 47 39	35
36	3·8141	3 48 51	3·8060	3 48 22	3·7981	3 47 53	3·7900	3 47 24	36
37	3·8101	3 48 36	3·8020	3 48 07	3·7940	3 47 38	3·7860	3 47 10	37
38	3·8060	3 48 22	3·7982	3 47 54	3·7900	3 47 24	3·7820	3 46 55	38
39	3·8019	3 48 07	3·7938	3 47 37	3·7859	3 47 09	3·7779	3 46 40	39
40	3·7979	3 47 52	3·7898	3 47 23	3·7819	3 46 55	3·7739	3 46 26	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$8^h\ 04^m\ 00^s$		$8^h\ 04^m\ 30^s$		$8^h\ 05^m\ 00^s$		$8^h\ 05^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	3.9290	3 55 44	3.9206	3 55 14	3.9124	3 54 45	3.9041	3 54 14	1
2	3.9246	3 55 29	3.9163	3 54 59	3.9080	3 54 29	3.8997	3 53 59	2
3	3.9202	3 55 13	3.9119	3 54 43	3.9036	3 54 13	3.8954	3 53 43	3
4	3.9159	3 54 57	3.9076	3 54 27	3.8994	3 53 58	3.8911	3 53 28	4
5	3.9115	3 54 41	3.9033	3 54 12	3.8950	3 53 42	3.8868	3 53 12	5
6	3.9073	3 54 26	3.8990	3 53 56	3.8907	3 53 27	3.8825	3 52 57	6
7	3.9029	3 54 10	3.8946	3 53 41	3.8865	3 53 11	3.8782	3 52 42	7
8	3.8986	3 53 55	3.8904	3 53 25	3.8821	3 52 56	3.8739	3 52 26	8
9	3.8944	3 53 40	3.8862	3 53 10	3.8779	3 52 40	3.8697	3 52 11	9
10	3.8901	3 53 24	3.8818	3 52 54	3.8736	3 52 25	3.8655	3 51 56	10
11	3.8858	3 53 09	3.8775	3 52 39	3.8694	3 52 10	3.8612	3 51 40	11
12	3.8816	3 52 54	3.8734	3 52 24	3.8652	3 51 55	3.8570	3 51 25	12
13	3.8773	3 52 38	3.8691	3 52 09	3.8609	3 51 39	3.8527	3 51 10	13
14	3.8730	3 52 23	3.8648	3 51 53	3.8566	3 51 24	3.8485	3 50 54	14
15	3.8688	3 52 07	3.8606	3 51 38	3.8525	3 51 09	3.8443	3 50 39	15
16	3.8645	3 51 52	3.8564	3 51 23	3.8482	3 50 54	3.8401	3 50 24	16
17	3.8604	3 51 37	3.8522	3 51 08	3.8441	3 50 39	3.8359	3 50 09	17
18	3.8562	3 51 22	3.8480	3 50 53	3.8399	3 50 24	3.8317	3 49 54	18
19	3.8519	3 51 07	3.8438	3 50 37	3.8356	3 50 08	3.8275	3 49 39	19
20	3.8477	3 50 52	3.8396	3 50 23	3.8315	3 49 53	3.8234	3 49 24	20
21	3.8436	3 50 37	3.8355	3 50 08	3.8274	3 49 39	3.8193	3 49 09	21
22	3.8395	3 50 22	3.8314	3 49 53	3.8233	3 49 24	3.8152	3 48 55	22
23	3.8353	3 50 07	3.8272	3 49 38	3.8191	3 49 09	3.8110	3 48 40	23
24	3.8312	3 49 52	3.8231	3 49 23	3.8150	3 48 54	3.8069	3 48 25	24
25	3.8270	3 49 37	3.8189	3 49 08	3.8108	3 48 39	3.8027	3 48 10	25
26	3.8229	3 49 22	3.8148	3 48 53	3.8067	3 48 24	3.7987	3 47 55	26
27	3.8187	3 49 07	3.8106	3 48 38	3.8026	3 48 09	3.7945	3 47 40	27
28	3.8146	3 48 53	3.8065	3 48 23	3.7985	3 47 54	3.7905	3 47 26	28
29	3.8105	3 48 38	3.8024	3 48 09	3.7944	3 47 40	3.7863	3 47 11	29
30	3.8065	3 48 23	3.7984	3 47 54	3.7904	3 47 25	3.7827	3 46 58	30
31	3.8024	3 48 09	3.7943	3 47 39	3.7863	3 47 11	3.7783	3 46 42	31
32	3.7983	3 47 54	3.7902	3 47 25	3.7822	3 46 56	3.7742	3 46 27	32
33	3.7942	3 47 39	3.7862	3 47 10	3.7782	3 46 42	3.7702	3 46 13	33
34	3.7901	3 47 24	3.7821	3 46 56	3.7741	3 46 27	3.7661	3 45 58	34
35	3.7861	3 47 10	3.7781	3 46 41	3.7701	3 46 12	3.7621	3 45 44	35
36	3.7820	3 46 55	3.7740	3 46 26	3.7660	3 45 58	3.7580	3 45 29	36
37	3.7780	3 46 41	3.7700	3 46 12	3.7620	3 45 43	3.7541	3 45 15	37
38	3.7740	3 46 26	3.7660	3 45 58	3.7580	3 45 29	3.7501	3 45 00	38
39	3.7699	3 46 12	3.7619	3 45 43	3.7540	3 45 14	3.7460	3 44 46	39
40	3.7659	3 45 57	3.7579	3 45 28	3.7500	3 45 00	3.7421	3 44 32	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$8^h\ 06^m\ 00^s$		$8^h\ 06^m\ 30^s$		$8^h\ 07^m\ 00^s$		$8^h\ 07^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
'	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	'
1	3.8957	3 53 45	3.8874	3 53 15	3.8791	3 52 45	3.8707	3 52 15	1
2	3.8914	3 53 29	3.8830	3 52 59	3.8747	3 52 29	3.8664	3 51 59	2
3	3.8871	3 53 14	3.8787	3 52 43	3.8705	3 52 14	3.8621	3 51 44	3
4	3.8827	3 52 58	3.8745	3 52 28	3.8662	3 51 58	3.8578	3 51 28	4
5	3.8785	3 52 42	3.8702	3 52 13	3.8619	3 51 43	3.8535	3 51 13	5
6	3.8742	3 52 27	3.8659	3 51 57	3.8576	3 51 27	3.8493	3 50 57	6
7	3.8699	3 52 12	3.8616	3 51 42	3.8534	3 51 12	3.8450	3 50 42	7
8	3.8656	3 51 55	3.8574	3 51 27	3.8491	3 50 57	3.8408	3 50 27	8
9	3.8614	3 51 41	3.8532	3 51 12	3.8449	3 50 42	3.8366	3 50 12	9
10	3.8572	3 51 26	3.8489	3 50 56	3.8407	3 50·27	3.8324	3 49 57	10
11	3.8529	3 51 10	3.8447	3 50 41	3.8365	3 50 12	3.8282	3 49 42	11
12	3.8487	3 50 55	3.8405	3 50 26	3.8323	3 49 56	3.8240	3 49 26	12
13	3.8445	3 50 40	3.8363	3 50 11	3.8281	3 49 41	3.8198	3 49 11	13
14	3.8403	3 50 25	3.8320	3 49 55	3.8238	3 49 25	3.8155	3 48 56	14
15	3.8361	3 50 10	3.8279	3 49 40	3.8197	3 49 11	3.8115	3 48 41	15
16	3.8318	3 49 54	3.8237	3 49 25	3.8155	3 48 56	3.8073	3 48 26	16
17	3.8277	3 49 40	3.8195	3 49 10	3.8114	3 48 41	3.8031	3 48 11	17
18	3.8236	3 49 25	3.8155	3 48 56	3.8073	3 48 26	3.7990	3 47 56	18
19	3.8194	3 49 10	3.8112	3 48 40	3.8030	3 48 11	3.7948	3 47 41	19
20	3.8153	3 48 55	3.8071	3 48 26	3.7989	3 47 56	3.7907	3 47 27	20
21	3.8110	3 48 40	3.8029	3 48 10	3.7948	3 47 41	3.7866	3 47 12	21
22	3.8070	3 48 25	3.7988	3 47 55	3.7907	3 47 27	3.7825	3 46 57	22
23	3.8028	3 48 10	3.7947	3 47 41	3.7866	3 47 12	3.7784	3 46 42	23
24	3.7987	3 47 55	3.7906	3 47 26	3.7825	3 46 57	3.7743	3 46 27	24
25	3.7946	3 47 41	3.7865	3 47 11	3.7785	3 46 42	3.7703	3 46 13	25
26	3.7905	3 47 26	3.7824	3 46 57	3.7743	3 46 27	3.7662	3 45 58	26
27	3.7864	3 47 11	3.7783	3 46 42	3.7703	3 46 13	3.7621	3 45 44	27
28	3.7823	3 46 56	3.7743	3 46 27	3.7662	3 45 58	3.7580	3 45 29	28
29	3.7783	3 46 42	3.7702	3 46 13	3.7621	3 45 44	3.7540	3 45 14	29
30	3.7742	3 46 27	3.7662	3 45 58	3.7581	3 45 29	3.7500	3 45 00	30
31	3.7702	3 46 13	3.7621	3 45 44	3.7541	3 45 15	3.7459	3 44 45	31
32	3.7661	3 45 58	3.7580	3 45 29	3.7500	3 45 00	3.7419	3 44 31	32
33	3.7621	3 45 44	3.7541	3 45 15	3.7460	3 44 46	3.7379	3 44 16	33
34	3.7580	3 45 29	3.7500	3 45 00	3.7420	3 44 31	3.7339	3 44 02	34
35	3.7541	3 45 15	3.7460	3 44 46	3.7380	3 44 17	3.7299	3 43 48	35
36	3.7500	3 45 00	3.7420	3 44 31	3.7340	3 44 02	3.7259	3 43 33	36
37	3.7460	3 44 46	3.7380	3 44 17	3.7300	3 43 48	3.7219	3 43 19	37
38	3.7421	3 44 32	3.7341	3 44 03	3.7261	3 43 34	3.7180	3 43 05	38
39	3.7380	3 44 17	3.7300	3 43 48	3.7220	3 43 19	3.7140	3 42 50	39
40	3.7341	3 44 03	3.7261	3 43 34	3.7181	3 43 05	3.7101	3 42 36	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$8^h\ 08^m\ 00^s$		$8^h\ 08^m\ 30^s$		$8^h\ 09^m\ 00^s$		$8^h\ 09^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	3.8625	3 51 45	3.8541	3 51 15	3.8457	3 50 45	3.8375	3 50 15	1
2	3.8581	3 51 29	3.8497	3 50 59	3.8414	3 50 29	3.8331	3 49 59	2
3	3.8538	3 51 13	3.8455	3 50 44	3.8372	3 50 14	3.8288	3 49 43	3
4	3.8495	3 50 58	3.8413	3 50 29	3.8329	3 49 58	3.8246	3 49 29	4
5	3.8453	3 50 43	3.8370	3 50 13	3.8287	3 49 43	3.8204	3 49 13	5
6	3.8411	3 50 28	3.8327	3 49 58	3.8245	3 49 28	3.8162	3 48 58	6
7	3.8368	3 50 12	3.8285	3 49 42	3.8203	3 49 13	3.8120	3 48 43	7
8	3.8325	3 49 57	3.8243	3 49 27	3.8160	3 48 58	3.8078	3 48 28	8
9	3.8284	3 49 42	3.8202	3 49 13	3.8119	3 48 43	3.8036	3 48 13	9
10	3.8242	3 49 27	3.8159	3 48 57	3.8077	3 48 28	3.7995	3 47 58	10
11	3.8200	3 49 12	3.8117	3 48 42	3.8035	3 48 13	3.7953	3 47 43	11
12	3.8158	3 48 57	3.8076	3 48 27	3.7994	3 47 58	3.7912	3 47 28	12
13	3.8116	3 48 42	3.8034	3 48 12	3.7952	3 47 43	3.7869	3 47 13	13
14	3.8074	3 48 27	3.7992	3 47 57	3.7910	3 47 28	3.7827	3 46 58	14
15	3.8033	3 48 12	3.7951	3 47 42	3.7868	3 47 12	3.7787	3 46 43	15
16	3.7991	3 47 57	3.7909	3 47 27	3.7827	3 46 58	3.7745	3 46 28	16
17	3.7950	3 47 42	3.7867	3 47 12	3.7786	3 46 43	3.7704	3 46 13	17
18	3.7909	3 47 27	3.7827	3 46 58	3.7745	3 46 28	3.7663	3 45 59	18
19	3.7867	3 47 12	3.7785	3 46 42	3.7703	3 46 13	3.7622	3 45 44	19
20	3.7826	3 46 57	3.7744	3 46 28	3.7662	3 45 58	3.7581	3 45 29	20
21	3.7785	3 46 42	3.7703	3 46 13	3.7622	3 45 44	3.7541	3 45 15	21
22	3.7744	3 46 28	3.7662	3 45 58	3.7581	3 45 29	3.7500	3 45 00	22
23	3.7703	3 46 13	3.7622	3 45 44	3.7541	3 45 15	3.7459	3 44 45	23
24	3.7662	3 45 58	3.7581	3 45 29	3.7500	3 45 00	3.7419	3 44 31	24
25	3.7622	3 45 44	3.7541	3 45 15	3.7459	3 44 45	3.7378	3 44 16	25
26	3.7581	3 45 29	3.7500	3 45 00	3.7419	3 44 31	3.7338	3 44 01	26
27	3.7541	3 45 15	3.7459	3 44 45	3.7378	3 44 16	3.7297	3 43 47	27
28	3.7500	3 45 00	3.7419	3 44 31	3.7338	3 44 01	3.7257	3 43 33	28
29	3.7459	3 44 45	3.7378	3 44 16	3.7298	3 43 47	3.7217	3 43 18	29
30	3.7419	3 44 31	3.7339	3 44 02	3.7258	3 43 33	3.7177	3 43 04	30
31	3.7379	3 44 16	3.7298	3 43 47	3.7218	3 43 18	3.7137	3 42 49	31
32	3.7339	3 44 02	3.7258	3 43 33	3.7178	3 43 04	3.7097	3 42 35	32
33	3.7298	3 43 47	3.7218	3 43 18	3.7138	3 42 49	3.7057	3 42 21	33
34	3.7259	3 43 33	3.7178	3 43 04	3.7098	3 42 35	3.7017	3 42 06	34
35	3.7219	3 43 19	3.7139	3 42 50	3.7058	3 42 21	3.6978	3 41 52	35
36	3.7179	3 43 04	3.7099	3 42 36	3.7018	3 42 06	3.6938	3 41 37	36
37	3.7140	3 42 50	3.7059	3 42 21	3.6979	3 41 52	3.6899	3 41 24	37
38	3.7101	3 42 36	3.7020	3 42 07	3.6940	3 41 38	3.6860	3 41 10	38
39	3.7060	3 42 22	3.6980	3 41 53	3.6900	3 41 24	3.6821	3 40 56	39
40	3.7021	3 42 08	3.6941	3 41 39	3.6861	3 41 10	3.6782	3 40 42	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$8^h\ 10^m\ 00^s$		$8^h\ 10^m\ 30^s$		$8^h\ 11^m\ 00^s$		$8^h\ 11^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	3.8291	3 49 45	3.8208	3 49 15	3.8125	3 48 45	3.8041	3 48 15	1
2	3.8248	3 49 29	3.8165	3 48 59	3.8082	3 48 30	3.7999	3 48 00	2
3	3.8206	3 49 14	3.8123	3 48 44	3.8040	3 48 14	3.7957	3 47 45	3
4	3.8164	3 48 59	3.8081	3 48 29	3.7998	3 47 59	3.7915	3 47 29	4
5	3.8122	3 48 44	3.8039	3 48 14	3.7956	3 47 44	3.7873	3 47 14	5
6	3.8079	3 48 28	3.7997	3 47 59	3.7914	3 47 29	3.7831	3 46 59	6
7	3.8037	3 48 13	3.7955	3 47 44	3.7872	3 47 14	3.7789	3 46 44	7
8	3.7995	3 47 58	3.7913	3 47 29	3.7830	3 46 59	3.7747	3 46 29	8
9	3.7954	3 47 43	3.7872	3 47 14	3.7789	3 46 44	3.7706	3 46 14	9
10	3.7912	3 47 28	3.7830	3 46 59	3.7748	3 46 29	3.7665	3 45 59	10
11	3.7870	3 47 13	3.7788	3 46 43	3.7706	3 46 14	3.7624	3 45 45	11
12	3.7829	3 46 58	3.7747	3 46 29	3.7665	3 45 59	3.7583	3 45 30	12
13	3.7787	3 46 43	3.7706	3 46 14	3.7624	3 45 45	3.7542	3 45 15	13
14	3.7746	3 46 29	3.7664	3 45 59	3.7582	3 45 30	3.7500	3 45 00	14
15	3.7705	3 46 14	3.7623	3 45 44	3.7542	3 45 15	3.7459	3 44 45	15
16	3.7663	3 45 59	3.7582	3 45 30	3.7500	3 45 00	3.7418	3 44 30	16
17	3.7623	3 45 44	3.7542	3 45 15	3.7459	3 44 45	3.7378	3 44 16	17
18	3.7582	3 45 30	3.7501	3 45 00	3.7419	3 44 31	3.7337	3 44 01	18
19	3.7541	3 45 15	3.7459	3 44 45	3.7378	3 44 16	3.7296	3 43 47	19
20	3.7500	3 45 00	3.7419	3 44 31	3.7337	3 44 01	3.7255	3 43 32	20
21	3.7459	3 44 45	3.7378	3 44 16	3.7297	3 43 47	3.7215	3 43 17	21
22	3.7419	3 44 31	3.7338	3 44 01	3.7256	3 43 32	3.7175	3 43 03	22
23	3.7378	3 44 16	3.7297	3 43 47	3.7215	3 43 17	3.7135	3 42 49	23
24	3.7338	3 44 01	3.7257	3 43 33	3.7175	3 43 03	3.7095	3 42 34	24
25	3.7297	3 43 47	3.7217	3 43 18	3.7136	3 42 49	3.7054	3 42 19	25
26	3.7257	3 43 33	3.7177	3 43 04	3.7095	3 42 34	3.7014	3 42 05	26
27	3.7217	3 43 18	3.7137	3 42 49	3.7055	3 42 20	3.6974	3 41 51	27
28	3.7177	3 43 04	3.7097	3 42 35	3.7014	3 42 05	3.6934	3 41 36	28
29	3.7137	3 42 49	3.7056	3 42 20	3.6975	3 41 51	3.6894	3 41 22	29
30	3.7097	3 42 35	3.7017	3 42 06	3.6936	3 41 37	3.6855	3 41 08	30
31	3.7057	3 42 21	3.6977	3 41 52	3.6896	3 41 23	3.6815	3 40 53	31
32	3.7017	3 42 06	3.6937	3 41 37	3.6856	3 41 08	3.6776	3 40 39	32
33	3.6977	3 41 52	3.6897	3 41 23	3.6817	3 40 54	3.6737	3 40 25	33
34	3.6937	3 41 37	3.6857	3 41 09	3.6778	3 40 40	3.6697	3 40 11	34
35	3.6898	3 41 23	3.6819	3 40 55	3.6738	3 40 25	3.6658	3 39 57	35
36	3.6858	3 41 09	3.6779	3 40 40	3.6698	3 40 11	3.6618	3 39 42	36
37	3.6820	3 40 55	3.6740	3 40 26	3.6660	3 39 58	3.6580	3 39 29	37
38	3.6781	3 40 41	3.6701	3 40 12	3.6621	3 39 44	3.6541	3 39 15	38
39	3.6741	3 40 27	3.6662	3 39 58	3.6582	3 39 30	3.6502	3 39 01	39
40	3.6702	3 40 13	3.6623	3 39 44	3.6543	3 39 15	3.6463	3 38 47	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$8^h\ 12^m\ 00^s$		$8^h\ 12^m\ 30^s$		$8^h\ 13^m\ 00^s$		$8^h\ 13^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	3·7958	3 47 45	3·7875	3 47 15	3·7792	3 46 45	3·7708	3 46 15	1
2	3·7916	3 47 30	3·7832	3 47 00	3·7749	3 46 30	3·7666	3 46 00	2
3	3·7874	3 47 15	3·7790	3 46 44	3·7708	3 46 15	3·7625	3 45 45	3
4	3·7833	3 47 00	3·7748	3 46 29	3·7666	3 46 00	3·7583	3 45 30	4
5	3·7790	3 46 44	3·7707	3 46 15	3·7625	3 45 45	3·7542	3 45 15	5
6	3·7748	3 46 29	3·7665	3 45 59	3·7583	3 45 30	3·7500	3 45 00	6
7	3·7707	3 46 15	3·7624	3 45 45	3·7542	3 45 15	3·7458	3 44 45	7
8	3·7665	3 45 59	3·7582	3 45 30	3·7500	3 45 00	3·7417	3 44 30	8
9	3·7625	3 45 45	3·7542	3 45 15	3·7459	3 44 45	3·7377	3 44 16	9
10	3·7583	3 45 30	3·7500	3 45 00	3·7418	3 44 30	3·7336	3 44 01	10
11	3·7542	3 45 15	3·7458	3 44 45	3·7377	3 44 16	3·7294	3 43 46	11
12	3·7501	3 45 00	3·7418	3 44 30	3·7336	3 44 01	3·7254	3 43 31	12
13	3·7459	3 44 45	3·7377	3 44 16	3·7295	3 43 46	3·7212	3 43 16	13
14	3·7418	3 44 30	3·7336	3 44 01	3·7254	3 43 31	3·7172	3 43 02	14
15	3·7377	3 44 16	3·7295	3 43 46	3·7213	3 43 17	3·7132	3 42 48	15
16	3·7336	3 44 01	3·7254	3 43 31	3·7172	3 43 02	3·7090	3 42 32	16
17	3·7296	3 43 47	3·7213	3 43 17	3·7132	3 42 48	3·7050	3 42 18	17
18	3·7255	3 43 32	3·7173	3 43 02	3·7092	3 42 33	3·7010	3 42 04	18
19	3·7214	3 43 17	3·7133	3 42 48	3·7051	3 42 18	3·6969	3 41 49	19
20	3·7174	3 43 03	3·7092	3 42 33	3·7011	3 42 04	3·6929	3 41 34	20
21	3·7134	3 42 48	3·7052	3 42 19	3·6971	3 41 50	3·6889	3 41 20	21
22	3·7094	3 42 34	3·7012	3 42 04	3·6931	3 41 35	3·6849	3 41 06	22
23	3·7054	3 42 19	3·6972	3 41 50	3·6891	3 41 21	3·6809	3 40 51	23
24	3·7013	3 42 05	3·6932	3 41 36	3·6851	3 41 06	3·6770	3 40 37	24
25	3·6973	3 41 50	3·6892	3 41 21	3·6811	3 40 52	3·6730	3 40 23	25
26	3·6933	3 41 36	3·6852	3 41 07	3·6772	3 40 38	3·6690	3 40 08	26
27	3·6893	3 41 21	3·6812	3 40 52	3·6732	3 40 24	3·6651	3 39 54	27
28	3·6853	3 41 07	3·6772	3 40 38	3·6692	3 40 09	3·6611	3 39 40	28
29	3·6814	3 40 53	3·6733	3 40 24	3·6652	3 39 55	3·6572	3 39 26	29
30	3·6775	3 40 39	3·6693	3 40 09	3·6613	3 39 41	3·6533	3 39 12	30
31	3·6735	3 40 25	3·6654	3 39 55	3·6574	3 39 27	3·6493	3 38 57	31
32	3·6695	3 40 10	3·6614	3 39 41	3·6534	3 39 12	3·6453	3 38 43	32
33	3·6656	3 39 56	3·6576	3 39 27	3·6496	3 38 59	3·6415	3 38 29	33
34	3·6617	3 39 42	3·6536	3 39 13	3·6456	3 38 44	3·6376	3 38 15	34
35	3·6578	3 39 28	3·6497	3 38 59	3·6417	3 38 30	3·6337	3 38 01	35
36	3·6538	3 39 13	3·6458	3 38 45	3·6378	3 38 16	3·6298	3 37 47	36
37	3·6500	3 39 00	3·6419	3 38 31	3·6340	3 38 02	3·6259	3 37 33	37
38	3·6461	3 38 46	3·6381	3 38 17	3·6301	3 37 48	3·6221	3 37 20	38
39	3·6422	3 38 32	3·6342	3 38 03	3·6262	3 37 34	3·6182	3 37 06	39
40	3·6383	3 38 18	3·6303	3 37 49	3·6223	3 37 20	3·6143	3 36 51	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$8^h\ 14^m\ 00^s$		$8^h\ 14^m\ 30^s$		$8^h\ 15^m\ 00^s$		$8^h\ 15^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
'	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	'
1	3·7625	3 45 45	3·7542	3 45 15	3·7458	3 44 45	3·7376	3 44 15	1
2	3·7583	3 45 30	3·7499	3 45 00	3·7416	3 44 30	3·7333	3 44 00	2
3	3·7542	3 45 15	3·7457	3 44 45	3·7375	3 44 15	3·7292	3 43 45	3
4	3·7500	3 45 00	3·7417	3 44 30	3·7334	3 44 00	3·7251	3 43 30	4
5	3·7458	3 44 45	3·7375	3 44 15	3·7293	3 43 45	3·7210	3 43 16	5
6	3·7417	3 44 30	3·7334	3 44 00	3·7251	3 43 30	3·7169	3 43 01	6
7	3·7376	3 44 15	3·7293	3 43 45	3·7210	3 43 16	3·7128	3 42 46	7
8	3·7335	3 44 01	3·7251	3 43 30	3·7169	3 43 01	3·7087	3 42 31	8
9	3·7294	3 43 46	3·7211	3 43 16	3·7129	3 42 46	3·7047	3 42 17	9
10	3·7253	3 43 31	3·7170	3 43 01	3·7087	3 42 31	3·7006	3 42 02	10
11	3·7212	3 43 16	3·7129	3 42 46	3·7047	3 42 17	3·6965	3 41 47	11
12	3·7172	3 43 02	3·7088	3 42 31	3·7007	3 42 03	3·6925	3 41 33	12
13	3·7131	3 42 47	3·7047	3 42 17	3·6966	3 41 48	3·6884	3 41 18	13
14	3·7089	3 42 32	3·7007	3 42 03	3·6925	3 41 33	3·6843	3 41 04	14
15	3·7049	3 42 18	3·6967	3 41 48	3·6884	3 41 18	3·6803	3 40 49	15
16	3·7008	3 42 03	3·6926	3 41 33	3·6844	3 41 04	3·6763	3 40 35	16
17	3·6967	3 41 48	3·6886	3 41 19	3·6804	3 40 49	3·6723	3 40 20	17
18	3·6928	3 41 34	3·6846	3 41 05	3·6764	3 40 35	3·6683	3 40 06	18
19	3·6888	3 41 19	3·6805	3 40 50	3·6724	3 40 21	3·6643	3 39 51	19
20	3·6848	3 41 05	3·6765	3 40 35	3·6684	3 40 06	3·6603	3 39 38	20
21	3·6808	3 40 51	3·6726	3 40 21	3·6644	3 39 52	3·6564	3 39 23	21
22	3·6768	3 40 36	3·6686	3 40 07	3·6605	3 39 38	3·6524	3 39 09	22
23	3·6728	3 40 22	3·6646	3 39 53	3·6565	3 39 23	3·6485	3 38 54	23
24	3·6688	3 40 07	3·6607	3 39 39	3·6526	3 39 09	3·6445	3 38 40	24
25	3·6649	3 39 54	3·6567	3 39 24	3·6487	3 38 55	3·6406	3 38 26	25
26	3·6609	3 39 39	3·6528	3 39 10	3·6447	3 38 41	3·6366	3 38 12	26
27	3·6570	3 39 25	3·6488	3 38 55	3·6407	3 38 27	3·6327	3 37 58	27
28	3·6530	3 39 11	3·6448	3 38 41	3·6368	3 38 12	3·6287	3 37 43	28
29	3·6491	3 38 57	3·6409	3 38 27	3·6328	3 37 58	3·6248	3 37 29	29
30	3·6452	3 38 43	3·6371	3 38 14	3·6290	3 37 44	3·6210	3 37 16	30
31	3·6412	3 38 28	3·6331	3 37 59	3·6251	3 37 30	3·6171	3 37 02	31
32	3·6373	3 38 14	3·6292	3 37 45	3·6212	3 37 16	3·6132	3 36 48	32
33	3·6334	3 38 00	3·6254	3 37 31	3·6173	3 37 02	3·6093	3 36 33	33
34	3·6295	3 37 46	3·6214	3 37 17	3·6134	3 36 48	3·6054	3 36 19	34
35	3·6257	3 37 33	3·6176	3 37 03	3·6096	3 36 35	3·6017	3 36 06	35
36	3·6218	3 37 18	3·6137	3 36 49	3·6057	3 36 21	3·5978	3 35 52	36
37	3·6179	3 37 04	3·6098	3 36 35	3·6019	3 36 07	3·5939	3 35 38	37
38	3·6141	3 36 51	3·6060	3 36 22	3·5981	3 35 53	3·5902	3 35 25	38
39	3·6102	3 36 37	3·6022	3 36 08	3·5942	3 35 39	3·5863	3 35 11	39
40	3·6063	3 36 23	3·5983	3 35 54	3·5904	3 35 25	3·5825	3 34 57	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$8^h\ 16^m\ 00^s$		$8^h\ 16^m\ 30^s$		$8^h\ 17^m\ 00^s$		$8^h\ 17^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	3.7292	3 43 45	3.7209	3 43 15	3.7126	3 42 45	3.7042	3 42 15	1
2	3.7250	3 43 30	3.7167	3 43 00	3.7084	3 42 30	3.7001	3 42 00	2
3	3.7209	3 43 15	3.7126	3 42 45	3.7043	3 42 15	3.6960	3 41 46	3
4	3.7168	3 43 00	3.7085	3 42 30	3.7002	3 42 01	3.6919	3 41 31	4
5	3.7127	3 42 46	3.7044	3 42 16	3.6962	3 41 46	3.6878	3 41 16	5
6	3.7086	3 42 31	3.7003	3 42 01	3.6921	3 41 32	3.6838	3 41 01	6
7	3.7045	3 42 16	3.6962	3 41 46	3.6880	3 41 17	3.6797	3 40 47	7
8	3.7004	3 42 01	3.6922	3 41 32	3.6839	3 41 02	3.6756	3 40 32	8
9	3.6963	3 41 47	3.6882	3 41 18	3.6799	3 40 48	3.6717	3 40 18	9
10	3.6923	3 41 32	3.6841	3 41 03	3.6758	3 40 33	3.6676	3 40 03	10
11	3.6882	3 41 18	3.6800	3 40 48	3.6718	3 40 18	3.6635	3 39 49	11
12	3.6842	3 41 03	3.6760	3 40 34	3.6678	3 40 04	3.6596	3 39 35	12
13	3.6802	3 40 49	3.6720	3 40 19	3.6638	3 39 49	3.6555	3 39 20	13
14	3.6762	3 40 34	3.6679	3 40 04	3.6598	3 39 36	3.6516	3 39 06	14
15	3.6722	3 40 20	3.6639	3 39 50	3.6558	3 39 21	3.6475	3 38 51	15
16	3.6681	3 40 05	3.6599	3 39 36	3.6518	3 39 06	3.6435	3 38 37	16
17	3.6641	3 39 51	3.6559	3 39 21	3.6478	3 38 52	3.6396	3 38 23	17
18	3.6602	3 39 37	3.6520	3 39 07	3.6438	3 38 37	3.6357	3 38 09	18
19	3.6561	3 39 22	3.6480	3 38 53	3.6398	3 38 23	3.6314	3 37 53	19
20	3.6522	3 39 08	3.6440	3 38 38	3.6359	3 38 09	3.6277	3 37 40	20
21	3.6482	3 38 54	3.6401	3 38 24	3.6319	3 37 55	3.6238	3 37 25	21
22	3.6442	3 38 39	3.6362	3 38 10	3.6280	3 37 41	3.6198	3 37 11	22
23	3.6403	3 38 25	3.6322	3 37 56	3.6241	3 37 27	3.6159	3 36 57	23
24	3.6364	3 38 11	3.6282	3 37 42	3.6202	3 37 13	3.6120	3 36 43	24
25	3.6324	3 37 57	3.6243	3 37 27	3.6162	3 36 58	3.6081	3 36 29	25
26	3.6283	3 37 42	3.6204	3 37 13	3.6123	3 36 44	3.6042	3 36 15	26
27	3.6244	3 37 28	3.6165	3 36 59	3.6084	3 36 30	3.6004	3 36 01	27
28	3.6206	3 37 14	3.6126	3 36 45	3.6045	3 36 16	3.5964	3 35 47	28
29	3.6168	3 37 00	3.6087	3 36 31	3.6007	3 36 03	3.5925	3 35 33	29
30	3.6129	3 36 46	3.6048	3 36 17	3.5968	3 35 48	3.5887	3 35 19	30
31	3.6090	3 36 32	3.6010	3 36 04	3.5929	3 35 34	3.5848	3 35 05	31
32	3.6051	3 36 18	3.5971	3 35 41	3.5891	3 35 21	3.5810	3 34 52	32
33	3.6013	3 36 05	3.5932	3 35 36	3.5853	3 35 07	3.5772	3 34 38	33
34	3.5973	3 35 50	3.5894	3 35 22	3.5814	3 34 53	3.5733	3 34 24	34
35	3.5936	3 35 37	3.5856	3 35 08	3.5776	3 34 39	3.5695	3 34 10	35
36	3.5898	3 35 23	3.5817	3 34 54	3.5738	3 34 25	3.5656	3 33 56	36
37	3.5859	3 35 09	3.5779	3 34 40	3.5699	3 34 12	3.5619	3 33 43	37
38	3.5821	3 34 56	3.5742	3 34 27	3.5662	3 33 58	3.5581	3 33 29	38
39	3.5783	3 34 42	3.5703	3 34 13	3.5623	3 33 44	3.5543	3 33 15	39
40	3.5745	3 34 28	3.5665	3 33 59	3.5585	3 33 30	3.5505	3 33 02	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$8^h\ 18^m\ 00^s$		$8^h\ 18^m\ 30^s$		$8^h\ 19^m\ 00^s$		$8^h\ 19^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	3.6959	3 41 45	3.6876	3 41 15	3.6792	3 40 45	3.6710	3 40 16	1
2	3.6918	3 41 30	3.6834	3 41 00	3.6751	3 40 30	3.6668	3 40 00	2
3	3.6877	3 41 16	3.6793	3 40 45	3.6711	3 40 16	3.6627	3 39 46	3
4	3.6836	3 41 01	3.6752	3 40 31	3.6670	3 40 01	3.6587	3 39 31	4
5	3.6795	3 40 46	3.6712	3 40 16	3.6629	3 39 46	3.6547	3 39 17	5
6	3.6754	3 40 31	3.6672	3 40 02	3.6589	3 39 32	3.6507	3 39 03	6
7	3.6714	3 40 17	3.6631	3 39 47	3.6548	3 39 17	3.6466	3 38 48	7
8	3.6674	3 40 03	3.6591	3 39 33	3.6508	3 39 03	3.6426	3 38 33	8
9	3.6633	3 39 48	3.6551	3 39 18	3.6468	3 38 48	3.6387	3 38 19	9
10	3.6593	3 39 33	3.6511	3 39 04	3.6428	3 38 34	3.6347	3 38 05	10
11	3.6552	3 39 19	3.6470	3 38 49	3.6388	3 38 19	3.6306	3 37 50	11
12	3.6513	3 39 05	3.6431	3 38 35	3.6349	3 38 06	3.6267	3 37 36	12
13	3.6472	3 38 50	3.6391	3 38 21	3.6308	3 37 51	3.6227	3 37 22	13
14	3.6432	3 38 36	3.6351	3 38 06	3.6268	3 37 36	3.6187	3 37 07	14
15	3.6393	3 38 21	3.6311	3 37 52	3.6229	3 37 22	3.6148	3 36 53	15
16	3.6353	3 38 07	3.6271	3 37 38	3.6189	3 37 08	3.6108	3 36 39	16
17	3.6313	3 37 53	3.6232	3 37 24	3.6150	3 36 54	3.6068	3 36 24	17
18	3.6274	3 37 39	3.6192	3 37 09	3.6111	3 36 40	3.6030	3 36 11	18
19	3.6234	3 37 24	3.6152	3 36 55	3.6071	3 36 26	3.5990	3 35 56	19
20	3.6195	3 37 10	3.6113	3 36 41	3.6032	3 36 12	3.5950	3 35 42	20
21	3.6156	3 36 56	3.6074	3 36 27	3.5993	3 35 57	3.5912	3 35 28	21
22	3.6117	3 36 42	3.6036	3 36 13	3.5953	3 35 43	3.5873	3 35 14	22
23	3.6078	3 36 28	3.5997	3 35 59	3.5915	3 35 29	3.5834	3 35 00	23
24	3.6039	3 36 14	3.5957	3 35 45	3.5877	3 35 16	3.5796	3 34 47	24
25	3.6000	3 36 00	3.5918	3 35 30	3.5838	3 35 01	3.5757	3 34 33	25
26	3.5961	3 35 46	3.5880	3 35 17	3.5799	3 34 48	3.5718	3 34 18	26
27	3.5922	3 35 32	3.5841	3 35 03	3.5760	3 34 34	3.5680	3 34 05	27
28	3.5883	3 35 18	3.5802	3 34 49	3.5722	3 34 20	3.5641	3 33 51	28
29	3.5844	3 35 04	3.5763	3 34 35	3.5683	3 34 06	3.5603	3 33 37	29
30	3.5807	3 34 51	3.5726	3 34 21	3.5645	3 33 52	3.5565	3 33 23	30
31	3.5768	3 34 36	3.5687	3 34 07	3.5607	3 33 39	3.5526	3 33 09	31
32	3.5730	3 34 23	3.5648	3 33 53	3.5568	3 33 24	3.5488	3 32 55	32
33	3.5691	3 34 09	3.5611	3 33 40	3.5530	3 33 11	3.5450	3 32 42	33
34	3.5652	3 33 55	3.5572	3 33 26	3.5492	3 32 57	3.5412	3 32 28	34
35	3.5615	3 33 41	3.5534	3 33 12	3.5454	3 32 43	3.5374	3 32 15	35
36	3.5576	3 33 27	3.5496	3 32 59	3.5416	3 32 30	3.5336	3 32 01	36
37	3.5538	3 33 13	3.5458	3 32 45	3.5378	3 32 16	3.5299	3 31 48	37
38	3.5499	3 33 00	3.5421	3 32 32	3.5341	3 32 03	3.5262	3 31 34	38
39	3.5462	3 32 46	3.5382	3 32 18	3.5303	3 31 49	3.5223	3 31 20	39
40	3.5425	3 32 33	3.5345	3 32 04	3.5266	3 31 36	3.5186	3 31 07	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$8^h\ 20^m\ 00^s$		$8^h\ 20^m\ 30^s$		$8^h\ 21^m\ 00^s$		$8^h\ 21^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	3.6626	3 39 45	3.6543	3 39 15	3.6460	3 38 46	3.6378	3 38 16	1
2	3.6585	3 39 30	3.6502	3 39 01	3.6419	3 38 31	3.6337	3 38 01	2
3	3.6544	3 39 16	3.6462	3 38 46	3.6380	3 38 17	3.6296	3 37 47	3
4	3.6503	3 39 01	3.6422	3 38 32	3.6339	3 38 02	3.6256	3 37 32	4
5	3.6463	3 38 47	3.6382	3 38 18	3.6298	3 37 47	3.6216	3 37 18	5
6	3.6423	3 38 32	3.6342	3 38 03	3.6258	3 37 33	3.6176	3 37 03	6
7	3.6383	3 38 18	3.6300	3 37 48	3.6219	3 37 18	3.6136	3 36 49	7
8	3.6343	3 38 03	3.6261	3 37 34	3.6178	3 37 04	3.6096	3 36 35	8
9	3.6303	3 37 49	3.6222	3 37 20	3.6139	3 36 50	3.6057	3 36 21	9
10	3.6263	3 37 35	3.6182	3 37 06	3.6099	3 36 36	3.6018	3 36 06	10
11	3.6223	3 37 20	3.6142	3 36 51	3.6059	3 36 21	3.5978	3 35 52	11
12	3.6184	3 37 06	3.6102	3 36 37	3.6020	3 36 07	3.5938	3 35 37	12
13	3.6144	3 36 52	3.6062	3 36 22	3.5981	3 35 53	3.5899	3 35 24	13
14	3.6104	3 36 37	3.6023	3 36 08	3.5941	3 35 39	3.5859	3 35 09	14
15	3.6065	3 36 23	3.5984	3 35 54	3.5902	3 35 25	3.5820	3 34 55	15
16	3.6026	3 36 09	3.5944	3 35 40	3.5862	3 35 10	3.5781	3 34 41	16
17	3.5987	3 35 55	3.5905	3 35 26	3.5823	3 34 56	3.5742	3 34 27	17
18	3.5948	3 35 41	3.5866	3 35 12	3.5785	3 34 42	3.5703	3 34 13	18
19	3.5908	3 35 27	3.5827	3 34 58	3.5746	3 34 29	3.5664	3 33 59	19
20	3.5869	3 35 13	3.5788	3 34 43	3.5707	3 34 15	3.5625	3 33 45	20
21	3.5830	3 34 59	3.5749	3 34 30	3.5668	3 34 00	3.5587	3 33 31	21
22	3.5792	3 34 45	3.5711	3 34 16	3.5629	3 33 46	3.5548	3 33 17	22
23	3.5753	3 34 31	3.5672	3 34 02	3.5591	3 33 33	3.5510	3 33 04	23
24	3.5714	3 34 17	3.5633	3 33 48	3.5552	3 33 19	3.5472	3 32 50	24
25	3.5676	3 34 03	3.5595	3 33 34	3.5514	3 33 05	3.5433	3 32 36	25
26	3.5637	3 33 49	3.5557	3 33 21	3.5476	3 32 51	3.5395	3 32 22	26
27	3.5598	3 33 35	3.5518	3 33 06	3.5438	3 32 37	3.5357	3 32 09	27
28	3.5560	3 33 22	3.5480	3 32 53	3.5399	3 32 24	3.5318	3 31 54	28
29	3.5522	3 33 08	3.5442	3 32 39	3.5361	3 32 10	3.5280	3 31 41	29
30	3.5484	3 32 54	3.5404	3 32 25	3.5323	3 31 56	3.5242	3 31 27	30
31	3.5445	3 32 40	3.5365	3 32 11	3.5285	3 31 42	3.5205	3 31 14	31
32	3.5407	3 32 27	3.5328	3 31 58	3.5247	3 31 29	3.5167	3 31 00	32
33	3.5369	3 32 13	3.5290	3 31 44	3.5209	3 31 15	3.5129	3 30 46	33
34	3.5332	3 32 00	3.5252	3 31 31	3.5172	3 31 02	3.5092	3 30 33	34
35	3.5294	3 31 46	3.5214	3 31 17	3.5134	3 30 48	3.5054	3 30 19	35
36	3.5256	3 31 32	3.5176	3 31 03	3.5096	3 30 35	3.5016	3 30 06	36
37	3.5218	3 31 18	3.5139	3 30 50	3.5059	3 30 21	3.4979	3 29 52	37
38	3.5181	3 31 05	3.5102	3 30 37	3.5022	3 30 08	3.4942	3 29 39	38
39	3.5143	3 30 51	3.5064	3 30 23	3.4984	3 29 54	3.4905	3 29 26	39
40	3.5106	3 30 38	3.5027	3 30 10	3.4947	3 29 41	3.4868	3 29 12	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$8^h\ 22^m\ 00^s$		$8^h\ 22^m\ 30^s$		$8^h\ 23^m\ 00^s$		$8^h\ 23^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	3·6293	3 37 45	3·6210	3 37 16	3·6127	3 36 46	3·6044	3 36 16	1
2	3·6252	3 37 31	3·6169	3 37 01	3·6086	3 36 31	3·6003	3 36 01	2
3	3·6212	3 37 16	3·6129	3 36 46	3·6046	3 36 17	3·5963	3 35 47	3
4	3·6173	3 37 02	3·6089	3 36 32	3·6007	3 36 03	3·5923	3 35 32	4
5	3·6132	3 36 48	3·6049	3 36 18	3·5967	3 35 48	3·5884	3 35 18	5
6	3·6092	3 36 33	3·6010	3 36 04	3·5927	3 35 34	3·5844	3 35 04	6
7	3·6052	3 36 19	3·5970	3 35 49	3·5888	3 35 19	3·5805	3 34 50	7
8	3·6013	3 36 05	3·5932	3 35 36	3·5848	3 35 05	3·5765	3 34 35	8
9	3·5974	3 35 51	3·5892	3 35 21	3·5809	3 34 51	3·5727	3 34 22	9
10	3·5934	3 35 36	3·5852	3 35 07	3·5769	3 34 37	3·5687	3 34 07	10
11	3·5895	3 35 22	3·5812	3 34 52	3·5730	3 34 23	3·5648	3 33 53	11
12	3·5856	3 35 08	3·5773	3 34 38	3·5691	3 34 09	3·5609	3 33 39	12
13	3·5816	3 34 54	3·5734	3 34 24	3·5652	3 33 55	3·5570	3 33 25	13
14	3·5777	3 34 40	3·5694	3 34 10	3·5612	3 33 40	3·5530	3 33 11	14
15	3·5738	3 34 25	3·5656	3 33 56	3·5574	3 33 27	3·5492	3 32 57	15
16	3·5698	3 34 11	3·5617	3 33 42	3·5534	3 33 12	3·5452	3 32 43	16
17	3·5660	3 33 58	3·5578	3 33 28	3·5496	3 32 59	3·5414	3 32 29	17
18	3·5622	3 33 44	3·5539	3 33 14	3·5458	3 32 45	3·5376	3 32 15	18
19	3·5582	3 33 30	3·5500	3 33 00	3·5418	3 32 30	3·5337	3 32 01	19
20	3·5543	3 33 15	3·5462	3 32 46	3·5380	3 32 17	3·5299	3 31 48	20
21	3·5505	3 33 02	3·5423	3 32 32	3·5342	3 32 03	3·5261	3 31 34	21
22	3·5467	3 32 48	3·5385	3 32 18	3·5304	3 31 49	3·5222	3 31 20	22
23	3·5428	3 32 34	3·5347	3 32 05	3·5266	3 31 36	3·5184	3 31 06	23
24	3·5390	3 32 20	3·5308	3 31 51	3·5228	3 31 22	3·5146	3 30 53	24
25	3·5352	3 32 07	3·5270	3 31 37	3·5189	3 31 08	3·5108	3 30 39	25
26	3·5313	3 31 53	3·5232	3 31 24	3·5151	3 30 54	3·5070	3 30 25	26
27	3·5275	3 31 39	3·5194	3 31 10	3·5113	3 30 41	3·5032	3 30 12	27
28	3·5238	3 31 25	3·5156	3 30 56	3·5075	3 30 27	3·4995	3 29 58	28
29	3·5199	3 31 12	3·5118	3 30 42	3·5038	3 30 13	3·4957	3 29 45	29
30	3·5162	3 30 58	3·5081	3 30 29	3·5000	3 30 00	3·4920	3 29 31	30
31	3·5124	3 30 45	3·5043	3 30 15	3·4962	3 29 46	3·4882	3 29 18	31
32	3·5085	3 30 30	3·5005	3 30 02	3·4925	3 29 33	3·4844	3 29 04	32
33	3·5048	3 30 17	3·4968	3 29 48	3·4888	3 29 19	3·4808	3 28 51	33
34	3·5011	3 30 04	3·4930	3 29 35	3·4850	3 29 06	3·4770	3 28 37	34
35	3·4973	3 29 50	3·4893	3 29 21	3·4813	3 28 53	3·4733	3 28 24	35
36	3·4936	3 29 37	3·4855	3 29 08	3·4776	3 28 39	3·4695	3 28 10	36
37	3·4898	3 29 23	3·4818	3 28 54	3·4738	3 28 25	3·4658	3 27 57	37
38	3·4862	3 29 10	3·4782	3 28 42	3·4702	3 28 13	3·4622	3 27 44	38
39	3·4824	3 28 57	3·4744	3 28 28	3·4664	3 27 59	3·4585	3 27 30	39
40	3·4788	3 28 43	3·4708	3 28 15	3·4628	3 27 46	3·4548	3 27 17	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$8^h\ 24^m\ 00^s$		$8^h\ 24^m\ 30^s$		$8^h\ 25^m\ 00^s$		$8^h\ 25^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	3·5961	3 35 46	3·5878	3 35 16	3·5794	3 34 46	3·5711	3 34 16	1
2	3·5920	3 35 31	3·5837	3 35 01	3·5753	3 34 31	3·5671	3 34 02	2
3	3·5881	3 35 17	3·5798	3 34 47	3·5714	3 34 17	3·5631	3 33 47	3
4	3·5841	3 35 03	3·5758	3 34 33	3·5675	3 34 03	3·5592	3 33 33	4
5	3·5802	3 34 49	3·5718	3 34 18	3·5635	3 33 49	3·5552	3 33 19	5
6	3·5762	3 34 34	3·5679	3 34 04	3·5596	3 33 35	3·5513	3 33 05	6
7	3·5722	3 34 20	3·5639	3 33 50	3·5557	3 33 21	3·5474	3 32 51	7
8	3·5683	3 34 06	3·5600	3 33 36	3·5518	3 33 06	3·5435	3 32 37	8
9	3·5644	3 33 52	3·5562	3 33 22	3·5479	3 32 52	3·5397	3 32 23	9
10	3·5605	3 33 38	3·5522	3 33 08	3·5440	3 32 38	3·5358	3 32 09	10
11	3·5566	3 33 24	3·5483	3 32 54	3·5401	3 32 24	3·5318	3 31 54	11
12	3·5527	3 33 10	3·5445	3 32 40	3·5362	3 32 10	3·5280	3 31 41	12
13	3·5488	3 32 55	3·5406	3 32 26	3·5323	3 31 56	3·5241	3 31 27	13
14	3·5448	3 32 41	3·5366	3 32 12	3·5284	3 31 42	3·5202	3 31 13	14
15	3·5410	3 32 28	3·5328	3 31 58	3·5247	3 31 29	3·5164	3 30 59	15
16	3·5371	3 32 14	3·5289	3 31 44	3·5207	3 31 15	3·5125	3 30 45	16
17	3·5333	3 32 00	3·5251	3 31 30	3·5169	3 31 01	3·5088	3 30 31	17
18	3·5295	3 31 46	3·5212	3 31 16	3·5131	3 30 47	3·5049	3 30 18	18
19	3·5256	3 31 32	3·5174	3 31 03	3·5092	3 30 33	3·5011	3 30 04	19
20	3·5218	3 31 18	3·5136	3 30 49	3·5054	3 30 19	3·4972	3 29 50	20
21	3·5179	3 31 04	3·5098	3 30 35	3·5016	3 30 06	3·4935	3 29 37	21
22	3·5142	3 30 51	3·5060	3 30 22	3·4978	3 29 52	3·4897	3 29 23	22
23	3·5103	3 30 37	3·5022	3 30 08	3·4941	3 29 39	3·4859	3 29 09	23
24	3·5066	3 30 24	3·4984	3 29 54	3·4902	3 29 25	3·4822	3 28 56	24
25	3·5028	3 30 10	3·4946	3 29 41	3·4865	3 29 11	3·4784	3 28 42	25
26	3·4990	3 29 56	3·4908	3 29 27	3·4828	3 28 58	3·4747	3 28 29	26
27	3·4952	3 29 43	3·4871	3 29 14	3·4790	3 28 44	3·4709	3 28 15	27
28	3·4914	3 29 29	3·4832	3 29 00	3·4752	3 28 31	3·4672	3 28 02	28
29	3·4876	3 29 15	3·4796	3 28 47	3·4715	3 28 17	3·4634	3 27 49	29
30	3·4839	3 29 02	3·4758	3 28 33	3·4678	3 28 04	3·4597	3 27 35	30
31	3·4802	3 28 49	3·4721	3 28 20	3·4640	3 27 50	3·4560	3 27 22	31
32	3·4764	3 28 35	3·4683	3 28 06	3·4602	3 27 37	3·4522	3 27 08	32
33	3·4728	3 28 22	3·4647	3 27 53	3·4566	3 27 24	3·4486	3 26 55	33
34	3·4690	3 28 08	3·4609	3 27 39	3·4528	3 27 10	3·4448	3 26 41	34
35	3·4653	3 27 55	3·4572	3 27 26	3·4492	3 26 57	3·4412	3 26 28	35
36	3·4615	3 27 41	3·4535	3 27 13	3·4455	3 26 44	3·4375	3 26 15	36
37	3·4579	3 27 28	3·4498	3 26 59	3·4418	3 26 30	3·4338	3 26 01	37
38	3·4542	3 27 15	3·4462	3 26 46	3·4382	3 26 18	3·4302	3 25 49	38
39	3·4505	3 27 02	3·4425	3 26 33	3·4345	3 26 04	3·4265	3 25 35	39
40	3·4468	3 26 48	3·4388	3 26 19	3·4308	3 25 51	3·4228	3 25 22	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$8^h\ 26^m\ 00^s$		$8^h\ 26^m\ 30^s$		$8^h\ 27^m\ 00^s$		$8^h\ 27^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	3·5628	3 33 46	3·5544	3 33 16	3·5461	3 32 46	3·5378	3 32 16	1
2	3·5588	3 33 31	3·5504	3 33 01	3·5421	3 32 32	3·5337	3 32 01	2
3	3·5548	3 33 17	3·5465	3 32 47	3·5382	3 32 18	3·5299	3 31 48	3
4	3·5509	3 33 03	3·5426	3 32 33	3·5342	3 32 03	3·5260	3 31 34	4
5	3·5470	3 32 49	3·5387	3 32 19	3·5304	3 31 49	3·5221	3 31 20	5
6	3·5431	3 32 35	3·5348	3 32 05	3·5265	3 31 35	3·5182	3 31 05	6
7	3·5392	3 32 21	3·5309	3 31 51	3·5226	3 31 21	3·5143	3 30 51	7
8	3·5352	3 32 07	3·5269	3 31 37	3·5187	3 31 07	3·5104	3 30 38	8
9	3·5314	3 31 53	3·5232	3 31 24	3·5148	3 30 53	3·5066	3 30 24	9
10	3·5275	3 31 39	3·5192	3 31 09	3·5110	3 30 40	3·5028	3 30 10	10
11	3·5236	3 31 25	3·5153	3 30 55	3·5071	3 30 26	3·4989	3 29 56	11
12	3·5198	3 31 11	3·5116	3 30 42	3·5033	3 30 12	3·4951	3 29 43	12
13	3·5159	3 30 57	3·5077	3 30 28	3·4995	3 29 58	3·4912	3 29 28	13
14	3·5121	3 30 44	3·5038	3 30 13	3·4956	3 29 44	3·4874	3 29 15	14
15	3·5082	3 30 30	3·5000	3 30 00	3·4918	3 29 30	3·4836	3 29 01	15
16	3·5044	3 30 16	3·4962	3 29 46	3·4879	3 29 16	3·4798	3 28 47	16
17	3·5006	3 30 02	3·4924	3 29 33	3·4842	3 29 03	3·4760	3 28 34	17
18	3·4968	3 29 48	3·4886	3 29 19	3·4804	3 28 49	3·4722	3 28 20	18
19	3·4929	3 29 34	3·4848	3 29 05	3·4766	3 28 36	3·4684	3 28 06	19
20	3·4892	3 29 21	3·4810	3 28 52	3·4728	3 28 22	3·4648	3 27 53	20
21	3·4854	3 29 07	3·4772	3 28 38	3·4691	3 28 09	3·4609	3 27 39	21
22	3·4816	3 28 54	3·4735	3 28 25	3·4653	3 27 55	3·4572	3 27 26	22
23	3·4778	3 28 40	3·4697	3 28 11	3·4615	3 27 41	3·4534	3 27 12	23
24	3·4741	3 28 27	3·4659	3 27 57	3·4578	3 27 28	3·4497	3 26 59	24
25	3·4703	3 28 13	3·4622	3 27 44	3·4541	3 27 15	3·4459	3 26 45	25
26	3·4666	3 28 00	3·4585	3 27 30	3·4503	3 27 01	3·4422	3 26 32	26
27	3·4628	3 27 46	3·4547	3 27 17	3·4466	3 26 48	3·4385	3 26 18	27
28	3·4591	3 27 33	3·4510	3 27 04	3·4428	3 26 34	3·4348	3 26 05	28
29	3·4554	3 27 19	3·4472	3 26 50	3·4392	3 26 21	3·4311	3 25 52	29
30	3·4517	3 27 06	3·4436	3 26 37	3·4355	3 26 08	3·4275	3 25 39	30
31	3·4479	3 26 52	3·4398	3 26 23	3·4318	3 25 54	3·4238	3 25 25	31
32	3·4442	3 26 39	3·4362	3 26 10	3·4281	3 25 41	3·4200	3 25 12	32
33	3·4406	3 26 26	3·4325	3 25 57	3·4245	3 25 28	3·4164	3 24 59	33
34	3·4368	3 26 12	3·4288	3 25 43	3·4208	3 25 15	3·4127	3 24 46	34
35	3·4332	3 26 00	3·4252	3 25 31	3·4172	3 25 02	3·4091	3 24 33	35
36	3·4295	3 25 46	3·4215	3 25 17	3·4134	3 24 48	3·4054	3 24 19	36
37	3·4259	3 25 33	3·4178	3 25 04	3·4098	3 24 35	3·4018	3 24 06	37
38	3·4222	3 25 20	3·4142	3 24 51	3·4062	3 24 22	3·3982	3 23 54	38
39	3·4185	3 25 06	3·4105	3 24 38	3·4025	3 24 09	3·3945	3 23 40	39
40	3·4149	3 24 54	3·4069	3 24 25	3·3989	3 23 56	3·3909	3 23 27	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$8^h\ 28^m\ 00^s$		$8^h\ 28^m\ 30^s$		$8^h\ 29^m\ 00^s$		$8^h\ 29^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	3.5295	3 31 46	3.5211	3 31 16	3.5128	3 30 46	3.5045	3 30 16	1
2	3.5255	3 31 32	3.5172	3 31 02	3.5088	3 30 31	3.5005	3 30 02	2
3	3.5216	3 31 18	3.5133	3 30 48	3.5049	3 30 18	3.4966	3 29 48	3
4	3.5177	3 31 04	3.5094	3 30 34	3.5011	3 30 04	3.4928	3 29 34	4
5	3.5138	3 30 49	3.5055	3 30 20	3.4972	3 29 50	3.4889	3 29 20	5
6	3.5099	3 30 36	3.5016	3 30 06	3.4933	3 29 36	3.4851	3 29 06	6
7	3.5061	3 30 22	3.4978	3 29 52	3.4895	3 29 22	3.4812	3 28 52	7
8	3.5022	3 30 08	3.4939	3 29 38	3.4856	3 29 08	3.4774	3 28 39	8
9	3.4984	3 29 54	3.4901	3 29 24	3.4818	3 28 54	3.4736	3 28 25	9
10	3.4945	3 29 40	3.4862	3 29 10	3.4780	3 28 41	3.4698	3 28 11	10
11	3.4907	3 29 27	3.4824	3 28 57	3.4742	3 28 27	3.4659	3 27 57	11
12	3.4869	3 29 13	3.4786	3 28 43	3.4704	3 28 13	3.4622	3 27 44	12
13	3.4831	3 28 59	3.4748	3 28 29	3.4666	3 28 00	3.4584	3 27 30	13
14	3.4792	3 28 45	3.4710	3 28 16	3.4628	3 27 46	3.4545	3 27 16	14
15	3.4755	3 28 32	3.4672	3 28 02	3.4590	3 27 32	3.4508	3 27 03	15
16	3.4716	3 28 18	3.4634	3 27 48	3.4552	3 27 19	3.4470	3 26 49	16
17	3.4681	3 28 05	3.4596	3 27 35	3.4515	3 27 05	3.4432	3 26 36	17
18	3.4641	3 27 51	3.4559	3 27 21	3.4477	3 26 52	3.4395	3 26 22	18
19	3.4602	3 27 37	3.4521	3 27 08	3.4439	3 26 38	3.4358	3 26 09	19
20	3.4565	3 27 23	3.4483	3 26 54	3.4402	3 26 25	3.4320	3 25 55	20
21	3.4528	3 27 10	3.4446	3 26 41	3.4365	3 26 11	3.4283	3 25 42	21
22	3.4491	3 26 57	3.4409	3 26 27	3.4328	3 25 58	3.4246	3 25 29	22
23	3.4453	3 26 43	3.4372	3 26 14	3.4290	3 25 44	3.4209	3 25 15	23
24	3.4416	3 26 30	3.4335	3 26 01	3.4253	3 25 31	3.4172	3 25 02	24
25	3.4378	3 26 16	3.4298	3 25 47	3.4216	3 25 18	3.4135	3 24 49	25
26	3.4342	3 26 03	3.4260	3 25 34	3.4179	3 25 04	3.4098	3 24 35	26
27	3.4305	3 25 50	3.4223	3 25 20	3.4142	3 24 51	3.4062	3 24 22	27
28	3.4268	3 25 36	3.4186	3 25 07	3.4105	3 24 38	3.4025	3 24 09	28
29	3.4230	3 25 23	3.4149	3 24 54	3.4068	3 24 24	3.3988	3 23 55	29
30	3.4194	3 25 10	3.4113	3 24 41	3.4032	3 24 12	3.3952	3 23 43	30
31	3.4157	3 24 57	3.4076	3 24 27	3.3995	3 23 58	3.3915	3 23 29	31
32	3.4120	3 24 43	3.4039	3 24 14	3.3958	3 23 45	3.3878	3 23 16	32
33	3.4084	3 24 30	3.4003	3 24 01	3.3922	3 23 32	3.3842	3 23 03	33
34	3.4047	3 24 17	3.3966	3 23 48	3.3886	3 23 19	3.3805	3 22 50	34
35	3.4011	3 24 04	3.3931	3 23 31	3.3850	3 23 06	3.3770	3 22 37	35
36	3.3974	3 23 51	3.3894	3 23 22	3.3813	3 22 53	3.3733	3 22 24	36
37	3.3938	3 23 37	3.3858	3 23 09	3.3778	3 22 40	3.3698	3 22 11	37
38	3.3902	3 23 25	3.3822	3 22 56	3.3742	3 22 27	3.3662	3 21 58	38
39	3.3865	3 23 11	3.3785	3 22 42	3.3705	3 22 14	3.3625	3 21 45	39
40	3.3830	3 22 59	3.3750	3 22 30	3.3670	3 22 01	3.3590	3 21 32	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$8^h\ 30^m\ 00^s$		$8^h\ 30^m\ 30^s$		$8^h\ 31^m\ 00^s$		$8^h\ 31^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
'	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	'
1	3·4962	3 29 46	3·4878	3 29 16	3·4795	3 28 46	3·4712	3 28 16	1
2	3·4922	3 29 32	3·4839	3 29 02	3·4756	3 28 32	3·4673	3 28 02	2
3	3·4883	3 29 18	3·4801	3 28 48	3·4718	3 28 18	3·4635	3 27 49	3
4	3·4845	3 29 04	3·4762	3 28 34	3·4679	3 28 04	3·4596	3 27 35	4
5	3·4807	3 28 51	3·4724	3 28 21	3·4641	3 27 51	3·4558	3 27 21	5
6	3·4768	3 28 36	3·4686	3 28 07	3·4602	3 27 37	3·4520	3 27 07	6
7	3·4730	3 28 23	3·4648	3 27 53	3·4565	3 27 23	3·4482	3 26 54	7
8	3·4692	3 28 09	3·4609	3 27 39	3·4526	3 27 09	3·4444	3 26 40	8
9	3·4654	3 27 55	3·4572	3 27 26	3·4489	3 26 56	3·4407	3 26 27	9
10	3·4615	3 27 41	3·4533	3 27 12	3·4451	3 26 42	3·4368	3 26 12	10
11	3·4578	3 27 28	3·4495	3 26 58	3·4413	3 26 29	3·4331	3 25 59	11
12	3·4540	3 27 14	3·4458	3 26 45	3·4375	3 26 15	3·4293	3 25 45	12
13	3·4502	3 27 01	3·4420	3 26 31	3·4338	3 26 01	3·4255	3 25 32	13
14	3·4463	3 26 47	3·4382	3 26 18	3·4300	3 25 48	3·4218	3 25 18	14
15	3·4426	3 26 33	3·4345	3 26 04	3·4262	3 25 34	3·4181	3 25 05	15
16	3·4388	3 26 19	3·4307	3 25 51	3·4225	3 25 21	3·4143	3 24 51	16
17	3·4351	3 26 06	3·4270	3 25 37	3·4188	3 25 07	3·4106	3 24 38	17
18	3·4314	3 25 53	3·4232	3 25 24	3·4151	3 24 54	3·4069	3 24 25	18
19	3·4276	3 25 39	3·4195	3 25 10	3·4113	3 24 41	3·4032	3 24 12	19
20	3·4239	3 25 26	3·4158	3 24 57	3·4076	3 24 27	3·3995	3 23 58	20
21	3·4202	3 25 13	3·4121	3 24 44	3·4039	3 24 14	3·3958	3 23 45	21
22	3·4165	3 24 59	3·4084	3 24 30	3·4002	3 24 01	3·3921	3 23 32	22
23	3·4128	3 24 46	3·4047	3 24 17	3·3965	3 23 47	3·3884	3 23 18	23
24	3·4091	3 24 33	3·4010	3 24 04	3·3929	3 23 34	3·3848	3 23 05	24
25	3·4054	3 24 19	3·3973	3 23 50	3·3892	3 23 21	3·3811	3 22 52	25
26	3·4018	3 24 06	3·3937	3 23 37	3·3855	3 23 08	3·3775	3 22 39	26
27	3·3981	3 23 53	3·3900	3 23 24	3·3819	3 22 55	3·3738	3 22 25	27
28	3·3944	3 23 40	3·3863	3 23 11	3·3782	3 22 42	3·3702	3 22 13	28
29	3·3907	3 23 27	3·3827	3 22 58	3·3746	3 22 29	3·3665	3 21 59	29
30	3·3871	3 23 14	3·3791	3 22 45	3·3710	3 22 16	3·3629	3 21 46	30
31	3·3835	3 23 01	3·3756	3 22 32	3·3674	3 22 03	3·3593	3 21 33	31
32	3·3798	3 22 47	3·3718	3 22 18	3·3638	3 21 49	3·3557	3 21 21	32
33	3·3762	3 22 34	3·3682	3 22 06	3·3602	3 21 37	3·3522	3 21 08	33
34	3·3725	3 22 21	3·3645	3 21 52	3·3565	3 21 23	3·3485	3 20 54	34
35	3·3690	3 22 08	3·3610	3 21 40	3·3530	3 21 11	3·3449	3 20 42	35
36	3·3653	3 21 55	3·3574	3 21 27	3·3493	3 20 57	3·3413	3 20 29	36
37	3·3618	3 21 42	3·3538	3 21 13	3·3458	3 20 45	3·3378	3 20 16	37
38	3·3582	3 21 30	3·3503	3 21 01	3·3422	3 20 32	3·3342	3 20 03	38
39	3·3546	3 21 17	3·3466	3 20 48	3·3386	3 20 19	3·3307	3 19 51	39
40	3·3511	3 21 04	3·3431	3 20 35	3·3351	3 20 06	3·3272	3 19 38	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$8^h\ 32^m\ 00^s$		$8^h\ 32^m\ 30^s$		$8^h\ 33^m\ 00^s$		$8^h\ 33^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	3·4628	3 27 46	3·4546	3 27 17	3·4462	3 26 46	3·4379	3 26 16	1
2	3·4590	3 27 32	3·4507	3 27 03	3·4423	3 26 32	3·4340	3 26 02	2
3	3·4551	3 27 18	3·4468	3 26 49	3·4385	3 26 18	3·4302	3 25 49	3
4	3·4513	3 27 05	3·4430	3 26 35	3·4347	3 26 05	3·4264	3 25 35	4
5	3·4475	3 26 51	3·4392	3 26 21	3·4309	3 25 51	3·4226	3 25 21	5
6	3·4437	3 26 37	3·4354	3 26 07	3·4271	3 25 38	3·4188	3 25 08	6
7	3·4398	3 26 23	3·4316	3 25 53	3·4233	3 25 24	3·4151	3 24 54	7
8	3·4360	3 26 10	3·4278	3 25 40	3·4196	3 25 11	3·4114	3 24 41	8
9	3·4324	3 25 57	3·4241	3 25 26	3·4159	3 24 57	3·4076	3 24 27	9
10	3·4286	3 25 43	3·4204	3 25 13	3·4122	3 24 44	3·4038	3 24 14	10
11	3·4248	3 25 29	3·4164	3 24 59	3·4083	3 24 30	3·4001	3 24 00	11
12	3·4211	3 25 15	3·4129	3 24 46	3·4046	3 24 17	3·3964	3 23 47	12
13	3·4173	3 25 01	3·4091	3 24 33	3·4009	3 24 03	3·3927	3 23 34	13
14	3·4135	3 24 48	3·4053	3 24 18	3·3972	3 23 50	3·3890	3 23 20	14
15	3·4099	3 24 35	3·4015	3 24 05	3·3934	3 23 36	3·3852	3 23 07	15
16	3·4061	3 24 22	3·3979	3 23 52	3·3898	3 23 23	3·3816	3 22 54	16
17	3·4023	3 24 08	3·3943	3 23 39	3·3860	3 23 10	3·3778	3 22 40	17
18	3·3986	3 23 55	3·3906	3 23 26	3·3824	3 22 57	3·3742	3 22 27	18
19	3·3950	3 23 42	3·3868	3 23 12	3·3787	3 22 43	3·3705	3 22 14	19
20	3·3912	3 23 28	3·3832	3 22 59	3·3750	3 22 30	3·3668	3 22 00	20
21	3·3875	3 23 15	3·3795	3 22 46	3·3713	3 22 17	3·3632	3 21 47	21
22	3·3840	3 23 02	3·3758	3 22 33	3·3677	3 22 04	3·3595	3 21 34	22
23	3·3802	3 22 49	3·3722	3 22 20	3·3640	3 21 50	3·3559	3 21 21	23
24	3·3766	3 22 36	3·3686	3 22 07	3·3604	3 21 37	3·3523	3 21 08	24
25	3·3729	3 22 22	3·3649	3 21 53	3·3568	3 21 24	3·3486	3 20 55	25
26	3·3693	3 22 09	3·3613	3 21 40	3·3531	3 21 11	3·3450	3 20 42	26
27	3·3656	3 21 56	3·3576	3 21 27	3·3495	3 20 58	3·3414	3 20 29	27
28	3·3620	3 21 43	3·3540	3 21 14	3·3459	3 20 45	3·3378	3 20 16	28
29	3·3584	3 21 30	3·3503	3 21 01	3·3423	3 20 32	3·3342	3 20 03	29
30	3·3547	3 21 17	3·3468	3 20 48	3·3387	3 20 19	3·3307	3 19 51	30
31	3·3512	3 21 04	3·3431	3 20 35	3·3351	3 20 06	3·3272	3 19 38	31
32	3·3476	3 20 51	3·3395	3 20 22	3·3316	3 19 54	3·3235	3 19 25	32
33	3·3440	3 20 38	3·3360	3 20 09	3·3280	3 19 41	3·3199	3 19 12	33
34	3·3404	3 20 25	3·3324	3 19 58	3·3244	3 19 28	3·3163	3 18 59	34
35	3·3367	3 20 12	3·3289	3 19 45	3·3209	3 19 15	3·3128	3 18 46	35
36	3·3333	3 20 00	3·3253	3 19 32	3·3173	3 19 02	3·3093	3 18 33	36
37	3·3297	3 19 47	3·3218	3 19 19	3·3137	3 18 49	3·3058	3 18 21	37
38	3·3263	3 19 35	3·3183	3 19 06	3·3102	3 18 37	3·3022	3 18 08	38
39	3·3226	3 19 21	3·3147	3 18 52	3·3067	3 18 24	3·2988	3 17 56	39
40	3·3192	3 19 09	3·3112	3 18 40	3·3032	3 18 12	3·2952	3 17 43	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	8h 34m 00s		8h 34m 30s		8h 35m 00s		8h 35m 30s		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
'	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	'
1	3·4295	3 25 46	3·4212	3 25 16	3·4129	3 24 46	3·4046	3 24 17	1
2	3·4257	3 25 33	3·4174	3 25 03	3·4091	3 24 32	3·4008	3 24 03	2
3	3·4219	3 25 19	3·4136	3 24 49	3·4053	3 24 19	3·3970	3 23 49	3
4	3·4181	3 25 05	3·4098	3 24 35	3·4016	3 24 05	3·3933	3 23 36	4
5	3·4144	3 24 52	3·4060	3 24 22	3·3978	3 23 52	3·3896	3 23 23	5
6	3·4106	3 24 38	3·4023	3 24 08	3·3941	3 23 38	3·3857	3 23 09	6
7	3·4068	3 24 24	3·3986	3 23 55	3·3904	3 23 25	3·3820	3 22 55	7
8	3·4030	3 24 11	3·3948	3 23 41	3·3866	3 23 11	3·3783	3 22 42	8
9	3·3993	3 23 57	3·3911	3 23 28	3·3829	3 22 58	3·3747	3 22 29	9
10	3·3956	3 23 44	3·3873	3 23 14	3·3791	3 22 44	3·3710	3 22 16	10
11	3·3919	3 23 31	3·3836	3 23 01	3·3755	3 22 31	3·3672	3 22 02	11
12	3·3882	3 23 18	3·3799	3 22 48	3·3718	3 22 18	3·3636	3 21 49	12
13	3·3845	3 23 04	3·3762	3 22 34	3·3680	3 22 04	3·3599	3 21 36	13
14	3·3807	3 22 50	3·3725	3 22 21	3·3644	3 21 51	3·3562	3 21 22	14
15	3·3770	3 22 37	3·3688	3 22 08	3·3606	3 21 38	3·3525	3 21 09	15
16	3·3733	3 22 24	3·3652	3 21 55	3·3569	3 21 24	3·3488	3 20 55	16
17	3·3697	3 22 11	3·3615	3 21 41	3·3534	3 21 12	3·3452	3 20 42	17
18	3·3660	3 21 58	3·3578	3 21 28	3·3497	3 20 58	3·3416	3 20 29	18
19	3·3623	3 21 44	3·3542	3 21 15	3·3461	3 20 45	3·3379	3 20 16	19
20	3·3587	3 21 31	3·3505	3 21 02	3·3425	3 20 33	3·3342	3 20 03	20
21	3·3550	3 21 18	3·3470	3 20 50	3·3389	3 20 20	3·3306	3 19 50	21
22	3·3514	3 21 05	3·3433	3 20 36	3·3352	3 20 06	3·3270	3 19 37	22
23	3·3478	3 20 52	3·3396	3 20 23	3·3317	3 19 54	3·3234	3 19 24	23
24	3·3442	3 20 39	3·3360	3 20 10	3·3280	3 19 41	3·3199	3 19 11	24
25	3·3406	3 20 26	3·3324	3 19 57	3·3244	3 19 27	3·3162	3 18 59	25
26	3·3369	3 20 13	3·3288	3 19 44	3·3208	3 19 15	3·3127	3 18 45	26
27	3·3333	3 20 00	3·3252	3 19 31	3·3172	3 19 02	3·3091	3 18 32	27
28	3·3297	3 19 47	3·3216	3 19 18	3·3136	3 18 49	3·3055	3 18 19	28
29	3·3261	3 19 34	3·3181	3 19 05	3·3100	3 18 36	3·3020	3 18 07	29
30	3·3226	3 19 21	3·3145	3 18 52	3·3066	3 18 24	3·2984	3 17 54	30
31	3·3190	3 19 08	3·3109	3 18 39	3·3030	3 18 11	3·2949	3 17 41	31
32	3·3154	3 18 55	3·3074	3 18 27	3·2994	3 17 58	3·2914	3 17 29	32
33	3·3119	3 18 43	3·3038	3 18 14	3·2959	3 17 44	3·2878	3 17 16	33
34	3·3083	3 18 30	3·3003	3 18 01	3·2923	3 17 31	3·2843	3 17 03	34
35	3·3048	3 18 17	3·2968	3 17 48	3·2888	3 17 18	3·2809	3 16 51	35
36	3·3013	3 18 05	3·2933	3 17 36	3·2854	3 17 06	3·2773	3 16 38	36
37	3·2978	3 17 52	3·2897	3 17 23	3·2818	3 16 53	3·2737	3 16 25	37
38	3·2943	3 17 39	3·2862	3 17 10	3·2783	3 16 41	3·2703	3 16 13	38
39	3·2907	3 17 27	3·2827	3 16 58	3·2748	3 16 29	3·2668	3 16 00	39
40	3·2872	3 17 14	3·2792	3 16 45.	3·2713	3 16 17	3·2634	3 15 48	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$8^h\ 36^m\ 00^s$		$8^h\ 36^m\ 30^s$		$8^h\ 37^m\ 00^s$		$8^h\ 37^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	3·3961	3 23 46	3·3879	3 23 16	3·3796	3 22 47	3·3713	3 22 17	1
2	3·3924	3 23 33	3·3840	3 23 02	3·3758	3 22 33	3·3675	3 22 03	2
3	3·3886	3 23 19	3·3804	3 22 49	3·3722	3 22 20	3·3638	3 21 50	3
4	3·3849	3 23 06	3·3766	3 22 36	3·3684	3 22 06	3·3600	3 21 36	4
5	3·3811	3 22 51	3·3729	3 22 22	3·3647	3 21 52	3·3564	3 21 23	5
6	3·3774	3 22 38	3·3692	3 22 09	3·3610	3 21 39	3·3527	3 21 10	6
7	3·3736	3 22 24	3·3654	3 21 55	3·3572	3 21 26	3·3490	3 20 56	7
8	3·3699	3 22 11	3·3617	3 21 42	3·3535	3 21 13	3·3453	3 20 43	8
9	3·3663	3 21 58	3·3580	3 21 29	3·3499	3 21 00	3·3417	3 20 30	9
10	3·3625	3 21 45	3·3543	3 21 15	3·3462	3 20 47	3·3380	3 20 17	10
11	3·3589	3 21 32	3·3506	3 21 02	3·3425	3 20 33	3·3343	3 20 03	11
12	3·3552	3 21 18	3·3470	3 20 49	3·3389	3 20 20	3·3306	3 19 50	12
13	3·3514	3 21 05	3·3433	3 20 36	3·3352	3 20 07	3·3270	3 19 37	13
14	3·3478	3 20 52	3·3396	3 20 23	3·3315	3 19 53	3·3233	3 19 24	14
15	3·3442	3 20 39	3·3361	3 20 10	3·3279	3 19 40	3·3198	3 19 12	15
16	3·3405	3 20 25	3·3324	3 19 57	3·3242	3 19 27	3·3161	3 18 58	16
17	3·3369	3 20 12	3·3287	3 19 43	3·3207	3 19 14	3·3125	3 18 45	17
18	3·3334	3 20 00	3·3251	3 19 30	3·3170	3 19 01	3·3088	3 18 32	18
19	3·3296	3 19 46	3·3215	3 19 17	3·3133	3 18 48	3·3052	3 18 19	19
20	3·3260	3 19 33	3·3179	3 19 04	3·3098	3 18 35	3·3017	3 18 06	20
21	3·3224	3 19 20	3·3143	3 18 51	3·3062	3 18 22	3·2981	3 17 53	21
22	3·3188	3 19 07	3·3107	3 18 38	3·3026	3 18 09	3·2945	3 17 40	22
23	3·3152	3 18 54	3·3071	3 18 26	3·2991	3 17 57	3·2909	3 17 27	23
24	3·3116	3 18 41	3·3035	3 18 13	3·2955	3 17 44	3·2873	3 17 14	24
25	3·3080	3 18 28	3·2999	3 18 00	3·2920	3 17 31	3·2839	3 17 01	25
26	3·3045	3 18 16	3·2964	3 17 47	3·2883	3 17 18	3·2802	3 16 48	26
27	3·3009	3 18 03	3·2929	3 17 34	3·2848	3 17 05	3·2767	3 16 36	27
28	3·2973	3 17 50	3·2891	3 17 21	3·2813	3 16 53	3·2732	3 16 24	28
29	3·2938	3 17 37	3·2857	3 17 08	3·2777	3 16 40	3·2696	3 16 11	29
30	3·2902	3 17 24	3·2822	3 16 56	3·2743	3 16 27	3·2661	3 15 58	30
31	3·2867	3 17 12	3·2787	3 16 43	3·2707	3 16 15	3·2627	3 15 46	31
32	3·2832	3 16 59	3·2751	3 16 30	3·2671	3 16 02	3·2591	3 15 33	32
33	3·2797	3 16 46	3·2717	3 16 18	3·2637	3 15 49	3·2557	3 15 20	33
34	3·2762	3 16 34	3·2681	3 16 05	3·2601	3 15 36	3·2522	3 15 08	34
35	3·2728	3 16 22	3·2647	3 15 53	3·2567	3 15 24	3·2487	3 14 55	35
36	3·2693	3 16 09	3·2612	3 15 40	3·2532	3 15 12	3·2452	3 14 43	36
37	3·2658	3 15 56	3·2578	3 15 28	3·2497	3 14 59	3·2417	3 14 30	37
38	3·2623	3 15 42	3·2543	3 15 15	3·2462	3 14 47	3·2382	3 14 18	38
39	3·2587	3 15 31	3·2508	3 15 02	3·2428	3 14 34	3·2348	3 14 05	39
40	3·2553	3 15 19	3·2473	3 14 50	3·2393	3 14 21	3·2314	3 13 53	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$8^h\ 38^m\ 00^s$		$8^h\ 38^m\ 30^s$		$8^h\ 39^m\ 00^s$		$8^h\ 39^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	3·3629	3 21 46	3·3546	3 21 16	3·3463	3 20 47	3·3380	3 20 17	1
2	3·3592	3 21 33	3·3509	3 21 03	3·3425	3 20 33	3·3343	3 20 03	2
3	3·3554	3 21 19	3·3472	3 20 50	3·3388	3 20 19	3·3304	3 19 49	3
4	3·3517	3 21 06	3·3435	3 20 37	3·3352	3 20 06	3·3269	3 19 36	4
5	3·3481	3 20 53	3·3398	3 20 23	3·3315	3 19 53	3·3232	3 19 23	5
6	3·3443	3 20 39	3·3361	3 20 10	3·3278	3 19 40	3·3195	3 19 10	6
7	3·3407	3 20 27	3·3324	3 19 57	3·3241	3 19 27	3 3158	3 18 57	7
8	3·3370	3 20 13	3·3288	3 19 44	3·3205	3 19 14	3·3121	3 18 43	8
9	3·3333	3 20 00	3·3251	3 19 30	3·3168	3 19 00	3·3085	3 18 30	9
10	3·3297	3 19 47	3·3215	3 19 17	3·3131	3 18 47	3·3049	3 18 17	10
11	3·3260	3 19 34	3·3178	3 19 04	3·3095	3 18 34	3·3013	3 18 05	11
12	3·3224	3 19 21	3·3142	3 18 51	3·3060	3 18 21	3·2977	3 17 52	12
13	3·3187	3 19 07	3·3106	3 18 38	3·3024	3 18 08	3·2941	3 17 39	13
14	3·3151	3 18 54	3·3069	3 18 25	3·2987	3 17 55	3·2904	3 17 26	14
15	3·3115	3 18 41	3·3033	3 18 12	3·2951	3 17 42	3·2868	3 17 13	15
16	3·3079	3 18 28	3·2997	3 17 59	3·2914	3 17 29	3·2833	3 17 00	16
17	3·3043	3 18 15	3·2962	3 17 46	3·2879	3 17 16	3·2797	3 16 47	17
18	3·3007	3 18 02	3·2925	3 17 33	3·2843	3 17 03	3·2760	3 16 34	18
19	3·2970	3 17 49	3·2889	3 17 20	3·2808	3 16 51	3·2725	3 16 21	19
20	3·2934	3 17 36	3·2853	3 17 07	3·2772	3 16 38	3·2690	3 16 08	20
21	3·2899	3 17 24	3·2818	3 16 54	3·2737	3 16 25	3·2654	3 15 55	21
22	3·2863	3 17 11	3·2782	3 16 42	3·2701	3 16 12	3·2619	3 15 43	22
23	3·2828	3 16 58	3·2747	3 16 29	3·2665	3 15 59	3·2583	3 15 30	23
24	3·2792	3 16 45	3·2711	3 16 16	3·2630	3 15 46	3·2548	3 15 17	24
25	3·2757	3 16 32	3·2676	3 16 03	3·2595	3 15 34	3·2513	3 15 05	25
26	3·2721	3 16 19	3·2641	3 15 51	3·2559	3 15 21	3·2477	3 14 52	26
27	3·2686	3 16 07	3·2605	3 15 38	3·2525	3 15 09	3·2443	3 14 39	27
28	3·2651	3 15 54	3·2570	3 15 25	3·2490	3 14 57	3·2408	3 14 27	28
29	3·2615	3 15 41	3·2535	3 15 13	3·2454	3 14 44	3·2373	3 14 14	29
30	3·2580	3 15 28	3·2501	3 15 00	3·2420	3 14 31	3·2338	3 14 02	30
31	3·2545	3 15 16	3·2465	3 14 47	3·2385	3 14 18	3·2303	3 13 49	31
32	3·2510	3 15 03	3·2430	3 14 35	3·2349	3 14 06	3·2268	3 13 36	32
33	3·2476	3 14 51	3·2396	3 14 23	3·2315	3 13 53	3·2235	3 13 24	33
34	3·2441	3 14 38	3·2361	3 14 10	3·2280	3 13 41	3·2199	3 13 12	34
35	3·2406	3 14 26	3·2326	3 13 57	3·2247	3 13 29	3·2165	3 12 59	35
36	3·2371	3 14 14	3·2291	3 13 45	3·2212	3 13 16	3·2131	3 12 47	36
37	3·2337	3 14 01	3·2257	3 13 32	3·2178	3 13 04	3·2097	3 12 35	37
38	3·2303	3 13 49	3·2223	3 13 20	3·2144	3 12 51	3·2063	3 12 22	38
39	3·2268	3 13 36	3·2189	3 13 08	3·2109	3 12 39	3·2026	3 12 09	39
40	3·2234	3 13 24	3·2154	3 12 55	3·2075	3 12 27	3·1992	3 11 57	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$8^h\ 40^m\ 00^s$		$8^h\ 40^m\ 30^s$		$8^h\ 41^m\ 00^s$		$8^h\ 41^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	3.3297	3 19 47	3.3213	3 19 17	3.3130	3 18 46	3.3047	3 18 17	1
2	3.3259	3 19 33	3.3176	3 19 03	3.3092	3 18 33	3.3010	3 18 03	2
3	3.3222	3 19 20	3.3139	3 18 50	3.3056	3 18 20	3.2973	3 17 50	3
4	3.3185	3 19 07	3.3103	3 18 37	3.3019	3 18 07	3.2937	3 17 37	4
5	3.3149	3 18 54	3.3068	3 18 24	3.2983	3 17 54	3.2900	3 17 24	5
6	3.3113	3 18 41	3.3030	3 18 11	3.2947	3 17 41	3.2864	3 17 11	6
7	3.3076	3 18 27	3.2993	3 17 57	3.2910	3 17 28	3.2828	3 16 58	7
8	3.3039	3 18 14	3.2956	3 17 44	3.2874	3 17 15	3.2791	3 16 45	8
9	3.3003	3 18 01	3.2921	3 17 31	3.2839	3 17 02	3.2756	3 16 32	9
10	3.2967	3 17 48	3.2884	3 17 18	3.2802	3 16 49	3.2720	3 16 19	10
11	3.2931	3 17 35	3.2848	3 17 05	3.2766	3 16 36	3.2684	3 16 06	11
12	3.2895	3 17 22	3.2813	3 16 52	3.2730	3 16 23	3.2648	3 15 54	12
13	3.2859	3 17 09	3.2776	3 16 39	3.2693	3 16 10	3.2612	3 15 41	13
14	3.2822	3 16 56	3.2740	3 16 26	3.2658	3 15 57	3.2576	3 15 28	14
15	3.2787	3 16 43	3.2704	3 16 13	3.2623	3 15 44	3.2541	3 15 15	15
16	3.2751	3 16 30	3.2669	3 16 01	3.2587	3 15 31	3.2505	3 15 03	16
17	3.2716	3 16 18	3.2634	3 15 48	3.2552	3 15 19	3.2470	3 14 50	17
18	3.2680	3 16 05	3.2598	3 15 35	3.2516	3 15 06	3.2435	3 14 37	18
19	3.2644	3 15 52	3.2562	3 15 22	3.2480	3 14 53	3.2399	3 14 24	19
20	3.2608	3 15 39	3.2527	3 15 10	3.2445	3 14 40	3.2364	3 14 11	20
21	3.2573	3 15 26	3.2491	3 14 57	3.2410	3 14 28	3.2329	3 13 58	21
22	3.2538	3 15 14	3.2457	3 14 45	3.2376	3 14 15	3.2294	3 13 46	22
23	3.2502	3 15 01	3.2422	3 14 32	3.2340	3 14 02	3.2259	3 13 33	23
24	3.2468	3 14 48	3.2386	3 14 19	3.2305	3 13 49	3.2224	3 13 20	24
25	3.2433	3 14 36	3.2351	3 14 06	3.2270	3 13 36	3.2189	3 13 08	25
26	3.2398	3 14 23	3.2316	3 13 54	3.2236	3 13 24	3.2154	3 12 55	26
27	3.2362	3 14 10	3.2281	3 13 41	3.2200	3 13 12	3.2120	3 12 42	27
28	3.2327	3 13 58	3.2247	3 13 29	3.2165	3 12 59	3.2085	3 12 30	28
29	3.2292	3 13 45	3.2212	3 13 16	3.2131	3 12 46	3.2050	3 12 18	29
30	3.2259	3 13 33	3.2178	3 13 04	3.2096	3 12 34	3.2016	3 12 06	30
31	3.2223	3 13 20	3.2143	3 12 51	3.2062	3 12 22	3.1982	3 11 53	31
32	3.2189	3 13 08	3.2108	3 12 39	3.2027	3 12 10	3.1947	3 11 40	32
33	3.2154	3 12 55	3.2074	3 12 27	3.1993	3 11 57	3.1913	3 11 28	33
34	3.2120	3 12 43	3.2039	3 12 14	3.1958	3 11 44	3.1879	3 11 16	34
35	3.2086	3 12 31	3.2006	3 12 02	3.1925	3 11 32	3.1845	3 11 04	35
36	3.2051	3 12 18	3.1971	3 11 50	3.1890	3 11 20	3.1810	3 10 52	36
37	3.2017	3 12 06	3.1937	3 11 37	3.1856	3 11 08	3.1777	3 10 40	37
38	3.1983	3 11 54	3.1903	3 11 25	3.1823	3 10 56	3.1743	3 10 27	38
39	3.1948	3 11 41	3.1869	3 11 13	3.1789	3 10 44	3.1709	3 10 14	39
40	3.1914	3 11 29	3.1835	3 11 01	3.1755	3 10 32	3.1675	3 10 02	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$8^h\ 42^m\ 00^s$		$8^h\ 42^m\ 30^s$		$8^h\ 43^m\ 00^s$		$8^h\ 43^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
'	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	'
1	3. 2963	3 17 47	3. 2880	3 17 17	3. 2798	3 16 46	3. 2714	3 16 17	1
2	3. 2927	3 17 34	3. 2844	3 17 04	3. 2760	3 16 33	3. 2678	3 16 04	2
3	3. 2890	3 17 20	3. 2807	3 16 51	3. 2724	3 16 20	3. 2642	3 15 51	3
4	3. 2854	3 17 07	3. 2771	3 16 38	3. 2688	3 16 07	3. 2605	3 15 37	4
5	3. 2818	3 16 54	3. 2735	3 16 25	3. 2652	3 16 54	3. 2569	3 15 24	5
6	3. 2781	3 16 41	3. 2699	3 16 12	3. 2616	3 15 41	3. 2533	3 15 11	6
7	3. 2745	3 16 28	3. 2662	3 15 58	3. 2580	3 15 28	3. 2497	3 14 58	7
8	3. 2710	3 16 15	3. 2626	3 15 45	3. 2544	3 15 15	3. 2461	3 14 45	8
9	3. 2674	3 16 02	3. 2591	3 15 33	3. 2508	3 15 03	3. 2426	3 14 33	9
10	3. 2638	3 15 49	3. 2555	3 15 20	3. 2473	3 14 50	3. 2390	3 14 20	10
11	3. 2601	3 15 36	3. 2519	3 15 07	3. 2437	3 14 37	3. 2355	3 14 07	11
12	3. 2567	3 15 24	3. 2484	3 14 54	3. 2402	3 14 24	3. 2321	3 13 55	12
13	3. 2531	3 15 11	3. 2448	3 14 41	3. 2366	3 14 11	3. 2284	3 13 42	13
14	3. 2495	3 14 58	3. 2412	3 14 28	3. 2331	3 13 58	3. 2248	3 13 29	14
15	3. 2460	3 14 46	3. 2377	3 14 16	3. 2296	3 13 46	3. 2213	3 13 16	15
16	3. 2424	3 14 34	3. 2342	3 14 03	3. 2259	3 13 33	3. 2178	3 13 04	16
17	3. 2389	3 14 22	3. 2307	3 13 51	3. 2225	3 13 21	3. 2143	3 12 52	17
18	3. 2358	3 14 09	3. 2272	3 13 38	3. 2190	3 13 08	3. 2109	3 12 40	18
19	3. 2318	3 13 56	3. 2236	3 13 25	3. 2154	3 12 55	3. 2073	3 12 27	19
20	3. 2283	3 13 43	3. 2201	3 13 12	3. 2120	3 12 42	3. 2039	3 12 14	20
21	3. 2248	3 13 30	3. 2166	3 13 00	3. 2085	3 12 30	3. 2004	3 12 02	21
22	3. 2213	3 13 17	3. 2131	3 12 47	3. 2050	3 12 18	3. 1969	3 11 49	22
23	3. 2178	3 13 04	3. 2097	3 12 35	3. 2016	3 12 05	3. 1934	3 11 36	23
24	3. 2144	3 12 52	3. 2062	3 12 22	3. 1981	3 11 52	3. 1900	3 11 24	24
25	3. 2109	3 12 39	3. 2027	3 12 10	3. 1946	3 11 40	3. 1866	3 11 11	25
26	3. 2074	3 12 26	3. 1993	3 11 57	3. 1912	3 11 28	3. 1831	3 10 58	26
27	3. 2039	3 12 14	3. 1958	3 11 45	3. 1877	3 11 15	3. 1797	3 10 46	27
28	3. 2005	3 12 02	3. 1923	3 11 32	3. 1843	3 11 03	3. 1762	3 10 34	28
29	3. 1970	3 11 50	3. 1889	3 11 20	3. 1808	3 10 50	3. 1728	3 10 21	29
30	3. 1936	3 11 37	3. 1855	3 11 08	3. 1774	3 10 38	3. 1694	3 10 09	30
31	3. 1901	3 11 25	3. 1821	3 10 55	3. 1740	3 10 26	3. 1660	3 09 57	31
32	3. 1867	3 11 13	3. 1787	3 10 43	3. 1705	3 10 13	3. 1626	3 09 45	32
33	3. 1833	3 11 00	3. 1753	3 10 31	3. 1672	3 10 01	3. 1593	3 09 33	33
34	3. 1799	3 10 48	3. 1718	3 10 18	3. 1638	3 09 49	3. 1559	3 09 20	34
35	3. 1765	3 10 35	3. 1684	3 10 06	3. 1604	3 09 27	3. 1525	3 09 09	35
36	3. 1730	3 10 23	3. 1650	3 09 54	3. 1570	3 09 25	3. 1490	3 08 56	36
37	3. 1697	3 10 11	3. 1617	3 09 42	3. 1537	3 09 13	3. 1457	3 08 44	37
38	3. 1663	3 09 58	3. 1583	3 09 30	3. 1503	3 09 01	3. 1424	3 08 32	38
39	3. 1630	3 09 46	3. 1549	3 09 18	3. 1469	3 08 49	3. 1390	3 08 19	39
40	3. 1596	3 09 34	3. 1516	3 09 06	3. 1436	3 08 37	3. 1357	3 08 07	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$8^h\ 44^m\ 00^s$		$8^h\ 44^m\ 30^s$		$8^h\ 45^m\ 00^s$		$8^h\ 45^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
'	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	'
1	3.2631	3 15 46	3.2547	3 15 16	3.2464	3 14 47	3.2381	3 14 17	1
2	3.2594	3 15 33	3.2510	3 15 03	3.2428	3 14 34	3.2345	3 14 04	2
3	3.2559	3 15 21	3.2475	3 14 51	3.2393	3 14 21	3.2309	3 13 51	3
4	3.2523	3 15 07	3.2439	3 14 37	3.2356	3 14 08	3.2273	3 13 38	4
5	3.2486	3 14 54	3.2403	3 14 24	3.2321	3 13 56	3.2237	3 13 25	5
6	3.2450	3 14 42	3.2368	3 14 12	3.2284	3 13 42	3.2202	3 13 13	6
7	3.2415	3 14 29	3.2332	3 13 59	3.2250	3 13 30	3.2166	3 13 00	7
8	3.2379	3 14 16	3.2297	3 13 46	3.2213	3 13 17	3.2131	3 12 47	8
9	3.2344	3 14 03	3.2261	3 13 33	3.2179	3 13 04	3.2096	3 12 34	9
10	3.2308	3 13 50	3.2225	3 13 21	3.2143	3 12 52	3.2060	3 12 22	10
11	3.2273	3 13 37	3.2190	3 13 08	3.2108	3 12 39	3.2025	3 12 09	11
12	3.2237	3 13 25	3.2155	3 12 55	3.2072	3 12 26	3.1989	3 11 56	12
13	3.2201	3 13 12	3.2120	3 12 43	3.2037	3 12 13	3.1955	3 11 44	13
14	3.2166	3 12 59	3.2084	3 12 30	3.2002	3 12 01	3.1920	3 11 31	14
15	3.2132	3 12 46	3.2050	3 12 18	3.1967	3 11 48	3.1885	3 11 18	15
16	3.2095	3 12 34	3.2014	3 12 05	3.1932	3 11 35	3.1850	3 11 06	16
17	3.2061	3 12 21	3.1979	3 11 52	3.1897	3 11 23	3.1815	3 10 53	17
18	3.2027	3 12 09	3.1944	3 11 39	3.1863	3 11 11	3.1781	3 10 41	18
19	3.1991	3 11 56	3.1910	3 11 27	3.1828	3 10 58	3.1746	3 10 29	19
20	3.1957	3 11 44	3.1875	3 11 15	3.1793	3 10 46	3.1712	3 10 16	20
21	3.1922	3 11 31	3.1841	3 11 02	3.1759	3 10 34	3.1677	3 10 04	21
22	3.1887	3 11 19	3.1806	3 10 49	3.1725	3 10 21	3.1642	3 09 51	22
23	3.1853	3 11 07	3.1771	3 10 37	3.1690	3 10 08	3.1609	3 09 39	23
24	3.1818	3 10 54	3.1737	3 10 25	3.1656	3 09 56	3.1575	3 09 27	24
25	3.1784	3 10 42	3.1703	3 10 12	3.1622	3 09 44	3.1541	3 09 15	25
26	3.1749	3 10 29	3.1669	3 10 00	3.1588	3 09 32	3.1506	3 09 02	26
27	3.1716	3 10 17	3.1634	3 09 48	3.1554	3 09 19	3.1472	3 08 50	27
28	3.1679	3 10 04	3.1601	3 09 36	3.1519	3 09 07	3.1437	3 08 37	28
29	3.1647	3 09 52	3.1566	3 09 24	3.1486	3 08 55	3.1404	3 08 25	29
30	3.1613	3 09 40	3.1533	3 09 12	3.1452	3 08 42	3.1371	3 08 13	30
31	3.1579	3 09 28	3.1498	3 09 00	3.1418	3 08 30	3.1337	3 08 01	31
32	3.1545	3 09 16	3.1464	3 08 47	3.1384	3 08 18	3.1304	3 07 49	32
33	3.1511	3 09 03	3.1431	3 08 35	3.1351	3 08 06	3.1270	3 07 37	33
34	3.1477	3 08 51	3.1397	3 08 23	3.1317	3 07 54	3.1237	3 07 25	34
35	3.1444	3 08 39	3.1364	3 08 11	3.1284	3 07 42	3.1203	3 07 13	35
36	3.1410	3 08 27	3.1329	3 07 58	3.1250	3 07 30	3.1169	3 07 01	36
37	3.1377	3 08 15	3.1297	3 07 47	3.1218	3 07 18	3.1136	3 06 49	37
38	3.1344	3 08 03	3.1264	3 07 35	3.1183	3 07 06	3.1103	3 06 37	38
39	3.1310	3 07 51	3.1230	3 07 23	3.1150	3 06 54	3.1070	3 06 25	39
40	3.1276	3 07 39	3.1197	3 07 11	3.1117	3 06 42	3.1037	3 06 13	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$8^h\ 46^m\ 00^s$		$8^h\ 46^m\ 30^s$		$8^h\ 47^m\ 00^s$		$8^h\ 47^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	3. 2297	3 13 47	3. 2214	3 13 17	3. 2132	3 12 47	3. 2048	3 12 18	1
2	3. 2261	3 13 34	3. 2178	3 13 04	3. 2095	3 12 34	3. 2012	3 12 05	2
3	3. 2226	3 13 21	3. 2143	3 12 52	3. 2059	3 12 21	3. 1977	3 11 52	3
4	3. 2190	3 13 08	3. 2107	3 12 39	3. 2025	3 12 08	3. 1941	3 11 40	4
5	3. 2154	3 12 55	3. 2071	3 12 26	3. 1989	3 11 56	3. 1907	3 11 27	5
6	3. 2119	3 12 43	3. 2036	3 12 13	3. 1954	3 11 43	3. 1871	3 11 14	6
7	3. 2084	3 12 30	3. 2001	3 12 00	3. 1918	3 11 30	3. 1835	3 11 01	7
8	3. 2048	3 12 17	3. 1966	3 11 47	3. 1883	3 11 17	3. 1801	3 10 48	8
9	3. 2013	3 12 05	3. 1931	3 11 35	3. 1849	3 11 05	3. 1766	3 10 36	9
10	3. 1978	3 11 52	3. 1896	3 11 23	3. 1814	3 10 53	3. 1731	3 10 23	10
11	3. 1942	3 11 39	3. 1862	3 11 10	3. 1778	3 10 40	3. 1696	3 10 11	11
12	3. 1907	3 11 27	3. 1827	3 10 57	3. 1744	3 10 28	3. 1662	3 09 58	12
13	3. 1872	3 11 14	3. 1792	3 10 45	3. 1709	3 10 15	3. 1627	3 09 45	13
14	3. 1837	3 11 01	3. 1757	3 10 32	3. 1673	3 10 02	3. 1592	3 09 33	14
15	3. 1803	3 10 49	3. 1722	3 10 20	3. 1640	3 09 50	3. 1558	3 09 21	15
16	3. 1768	3 10 36	3. 1687	3 10 07	3. 1605	3 09 37	3. 1524	3 09 08	16
17	3. 1734	3 10 23	3. 1652	3 09 55	3. 1570	3 09 25	3. 1489	3 08 56	17
18	3. 1700	3 10 11	3. 1617	3 09 43	3. 1536	3 09 13	3. 1455	3 08 44	18
19	3. 1665	3 09 59	3. 1583	3 09 31	3. 1501	3 09 01	3. 1419	3 08 32	19
20	3. 1630	3 09 47	3. 1549	3 09 18	3. 1467	3 08 49	3. 1386	3 08 19	20
21	3. 1596	3 09 35	3. 1514	3 09 05	3. 1434	3 08 36	3. 1353	3 08 07	21
22	3. 1562	3 09 22	3. 1480	3 08 53	3. 1400	3 08 24	3. 1319	3 07 54	22
23	3. 1527	3 09 09	3. 1446	3 08 41	3. 1366	3 08 12	3. 1285	3 07 42	23
24	3. 1493	3 08 57	3. 1412	3 08 29	3. 1331	3 07 59	3. 1251	3 07 30	24
25	3. 1460	3 08 45	3. 1378	3 08 17	3. 1298	3 07 47	3. 1218	3 07 19	25
26	3. 1426	3 08 33	3. 1344	3 08 04	3. 1264	3 07 35	3. 1184	3 07 07	26
27	3. 1391	3 08 21	3. 1310	3 07 52	3. 1230	3 07 23	3. 1149	3 06 54	27
28	3. 1357	3 08 09	3. 1276	3 07 40	3. 1197	3 07 11	3. 1116	3 06 42	28
29	3. 1324	3 07 57	3. 1243	3 07 28	3. 1163	3 06 59	3. 1082	3 06 30	29
30	3. 1290	3 07 44	3. 1210	3 07 16	3. 1129	3 06 47	3. 1049	3 06 18	30
31	3. 1256	3 07 32	3. 1177	3 07 04	3. 1096	3 06 34	3. 1015	3 06 05	31
32	3. 1222	3 07 20	3. 1144	3 06 52	3. 1063	3 06 22	3. 0981	3 05 53	32
33	3. 1189	3 07 08	3. 1110	3 06 39	3. 1029	3 06 10	3. 0949	3 05 41	33
34	3. 1156	3 06 56	3. 1076	3 06 27	3. 0995	3 05 58	3. 0916	3 05 29	34
35	3. 1122	3 06 44	3. 1043	3 06 16	3. 0962	3 05 47	3. 0883	3 05 17	35
36	3. 1089	3 06 32	3. 1009	3 06 04	3. 0929	3 05 35	3. 0849	3 05 06	36
37	3. 1056	3 06 20	3. 0976	3 05 52	3. 0897	3 05 23	3. 0817	3 04 54	37
38	3. 1023	3 06 08	3. 0943	3 05 40	3. 0864	3 05 11	3. 0784	3 04 42	38
39	3. 0990	3 05 56	3. 0910	3 05 28	3. 0831	3 04 59	3. 0751	3 04 30	39
40	3. 0958	3 05 45	3. 0878	3 05 16	3. 0798	3 04 47	3. 0718	3 04 18	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$8^h\ 48^m\ 00^s$		$8^h\ 48^m\ 30^s$		$8^h\ 49^m\ 00^s$		$8^h\ 49^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
'	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	'
1	3. 1935	3 11 46	3. 1881	3 11 18	3. 1798	3 10 47	3. 1716	3 10 18	1
2	3. 1929	3 11 33	3. 1846	3 11 05	3. 1762	3 10 34	3. 1680	3 10 05	2
3	3. 1893	3 11 20	3. 1810	3 10 52	3. 1727	3 10 22.	3. 1644	3 09 52	3
4	3. 1858	3 11 07	3. 1774	3 10 40	3. 1692	3 10 09	3. 1610	3 09 40	4
5	3. 1823	3 10 55	3. 1740	3 10 27	3. 1657	3 09 57	3. 1575	3 09 27	5
6	3. 1728	3 10 43	3. 1705	3 10 14	3. 1621	3 09 44	3. 1540	3 09 14	6
7	3. 1753	3 10 30	3. 1670	3 10 01	3. 1587	3 09 31	3. 1505	3 09 02	7
8	3. 1718	3 10 18	3. 1635	3 10 49	3. 1552	3 09 19	3. 1470	3 08 49	8
9	3. 1683	3 10 05	3. 1601	3 09 36	3. 1518	3 09 06	3. 1436	3 08 37	9
10	3. 1648	3 09 53	3. 1566	3 09 24	3. 1483	3 08 54	3. 1401	3 08 24	10
11	3. 1613	3 09 41	3. 1532	3 09 11	3. 1448	3 08 41	3. 1366	3 08 12	11
12	3. 1579	3 09 28	3. 1498	3 08 59	3. 1415	3 08 29	3. 1333	3 08 00	12
13	3. 1545	3 09 16	3. 1462	3 08 46	3. 1380	3 08 17	3. 1299	3 07 48	13
14	3. 1510	3 09 03	3. 1427	3 08 34	3. 1345	3 08 04	3. 1264	3 07 35	14
15	3. 1475	3 08 51	3. 1393	3 08 22	3. 1312	3 07 52	3. 1230	3 07 23	15
16	3. 1440	3 08 38	3. 1359	3 08 09	3. 1276	3 07 40	3. 1196	3 07 11	16
17	3. 1406	3 08 25	3. 1326	3 07 57	3. 1243	3 07 28	3. 1162	3 06 58	17
18	3. 1372	3 08 13	3. 1292	3 07 45	3. 1209	3 07 15	3. 1128	3 06 46	18
19	3. 1338	3 08 01	3. 1256	3 07 32	3. 1174	3 07 03	3. 1094	3 06 34	19
20	3. 1304	3 07 49	3. 1222	3 07 20	3. 1141	3 06 51	3. 1060	3 06 22	20
21	3. 1271	3 07 37	3. 1189	3 07 08	3. 1107	3 06 39	3. 1026	3 06 10	21
22	3. 1237	3 07 25	3. 1155	3 06 56	3. 1073	3 06 26	3. 0993	3 05 58	22
23	3. 1203	3 07 13	3. 1121	3 06 44	3. 1040	3 06 14	3. 0959	3 05 45	23
24	3. 1169	3 07 01	3. 1088	3 06 31	3. 1006	3 06 02	3. 0925	3 05 33	24
25	3. 1135	3 06 48	3. 1054	3 06 19	3. 0972	3 05 50	3. 0892	3 05 21	25
26	3. 1101	3 06 36	3. 1020	3 06 07	3. 0939	3 05 38	3. 0859	3 05 09	26
27	3. 1068	3 06 24	3. 0987	3 05 55	3. 0906	3 05 26	3. 0826	3 04 57	27
28	3. 1035	3 06 12	3. 0953	3 05 43	3. 0873	3 05 14	3. 0792	3 04 45	28
29	3. 1002	3 06 00	3. 0921	3 05 31	3. 0839	3 05 02	3. 0759	3 04 33	29
30	3. 0969	3 05 48	3. 0888	3 05 19	3. 0806	3 04 50	3. 0726	3 04 21	30
31	3. 0935	3 05 36	3. 0854	3 05 08	3. 0773	3 04 38	3. 0693	3 04 09	31
32	3. 0901	3 05 24	3. 0821	3 04 56	3. 0740	3 04 26	3. 0660	3 03 58	32
33	3. 0867	3 05 12	3. 0788	3 04 44	3. 0707	3 04 15	3. 0628	3 03 46	33
34	3. 0835	3 05 00	3. 0754	3 04 32	3. 0674	3 04 03	3. 0594	3 03 34	34
35	3. 0802	3 04 48	3. 0722	3 04 20	3. 0641	3 03 51	3. 0562	3 03 22	35
36	3. 0769	3 04 36	3. 0689	3 04 08	3. 0608	3 03 39	3. 0529	3 03 10	36
37	3. 0737	3 04 25	3. 0656	3 03 56	3. 0576	3 03 27	3. 0496	3 02 59	37
38	3. 0704	3 04 13	3. 0623	3 03 44	3. 0544	3 03 16	3. 0464	3 02 47	38
39	3. 0671	3 04 01	3. 0591	3 03 33	3. 0510	3 03 04	3. 0431	3 02 35	39
40	3. 0638	3 03 50	3. 0559	3 03 21	3. 0478	3 02 52	3. 0399	3 02 24	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$8^h\ 50^m\ 00^s$		$8^h\ 50^m\ 30^s$		$8^h\ 51^m\ 00^s$		$8^h\ 51^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	3. 1632	3 09 48	3. 1548	3 09 17	3. 1465	3 08 47	3. 1381	3 08 17	1
2	3. 1596	3 09 35	3. 1513	3 09 05	3. 1430	3 08 35	3. 1347	3 08 05	2
3	3. 1561	3 09 22	3. 1478	3 08 52	3. 1395	3 08 22	3. 1312	3 07 52	3
4	3. 1526	3 09 09	3. 1444	3 08 40	3. 1360	3 08 10	3. 1277	3 07 40	4
5	3. 1491	3 08 57	3. 1409	3 08 27	3. 1326	3 07 57	3. 1243	3 07 27	5
6	3. 1457	3 08 45	3. 1374	3 08 15	3. 1291	3 07 45	3. 1209	3 07 15	6
7	3. 1421	3 08 32	3. 1339	3 08 02	3. 1256	3 07 32	3. 1174	3 07 03	7
8	3. 1387	3 08 19	3. 1305	3 07 50	3. 1221	3 07 20	3. 1140	3 06 50	8
9	3. 1353	3 08 07	3. 1271	3 07 38	3. 1188	3 07 08	3. 1106	3 06 38	9
10	3. 1318	3 07 55	3. 1236	3 07 25	3. 1153	3 06 55	3. 1071	3 06 25	10
11	3. 1284	3 07 42	3. 1201	3 07 12	3. 1120	3 06 43	3. 1037	3 06 13	11
12	3. 1250	3 07 30	3. 1168	3 07 00	3. 1086	3 06 31	3. 1004	3 06 01	12
13	3. 1216	3 07 18	3. 1134	3 06 48	3. 1052	3 06 19	3. 0970	3 05 49	13
14	3. 1181	3 07 05	3. 1099	3 06 36	3. 1017	3 06 06	3. 0935	3 05 37	14
15	3. 1147	3 06 53	3. 1066	3 06 24	3. 0993	3 05 54	3. 0901	3 05 24	15
16	3. 1113	3 06 40	3. 1032	3 06 12	3. 0949	3 05 42	3. 0867	3 05 12	16
17	3. 1079	3 06 28	3. 0998	3 05 59	3. 0915	3 05 30	3. 0833	3 05 00	17
18	3. 1046	3 06 16	3. 0964	3 05 47	3. 0883	3 05 18	3. 0801	3 04 48	18
19	3. 1011	3 06 04	3. 0930	3 05 35	3. 0850	3 05 06	3. 0768	3 04 36	19
20	3. 0978	3 05 52	3. 0897	3 05 23	3. 0814	3 04 53	3. 0734	3 04 24	20
21	3. 0944	3 05 40	3. 0863	3 05 11	3. 0781	3 04 41	3. 0700	3 04 12	21
22	3. 0911	3 05 28	3. 0830	3 04 59	3. 0748	3 04 29	3. 0667	3 04 00	22
23	3. 0877	3 05 16	3. 0797	3 04 47	3. 0715	3 04 17	3. 0634	3 03 48	23
24	3. 0844	3 05 04	3. 0763	3 04 35	3. 0682	3 04 05	3. 0601	3 03 36	24
25	3. 0811	3 04 52	3. 0730	3 04 23	3. 0649	3 03 54	3. 0567	3 03 24	25
26	3. 0777	3 04 40	3. 0697	3 04 11	3. 0616	3 03 42	3. 0534	3 03 12	26
27	3. 0744	3 04 28	3. 0663	3 03 59	3. 0583	3 03 30	3. 0502	3 03 01	27
28	3. 0710	3 04 16	3. 0630	3 03 47	3. 0549	3 03 18	3. 0469	3 02 49	28
29	3. 0677	3 04 04	3. 0597	3 03 35	3. 0516	3 03 06	3. 0435	3 02 36	29
30	3. 0645	3 03 52	3. 0565	3 03 23	3. 0484	3 02 54	3. 0403	3 02 25	30
31	3. 0612	3 03 40	3. 0532	3 03 12	3. 0451	3 02 42	3. 0370	3 02 13	31
32	3. 0579	3 03 28	3. 0499	3 03 00	3. 0419	3 02 31	3. 0338	3 02 02	32
33	3. 0546	3 03 17	3. 0466	3 02 48	3. 0385	3 02 19	3. 0305	3 01 50	33
34	3. 0514	3 03 05	3. 0433	3 02 36	3. 0353	3 02 08	3. 0273	3 01 38	34
35	3. 0481	3 02 53	3. 0401	3 02 24	3. 0322	3 01 56	3. 0240	3 01 26	35
36	3. 0448	3 02 41	3. 0368	3 02 13	3. 0289	3 01 44	3. 0208	3 01 15	36
37	3. 0416	3 02 30	3. 0336	3 02 01	3. 0256	3 01 32	3. 0176	3 01 03	37
38	3. 0384	3 02 18	3. 0304	3 01 49	3. 0224	3 01 21	3. 0144	3 00 52	38
39	3. 0351	3 02 06	3. 0271	3 01 38	3. 0191	3 01 09	3. 0111	3 00 40	39
40	3. 0319	3 01 55	3. 0239	3 01 26	3. 0159	3 00 57	3. 0079	3 00 28	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$8^h\ 52^m\ 00^s$		$8^h\ 52^m\ 30^s$		$8^h\ 53^m\ 00^s$		$8^h\ 53^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	3. 1299	3 07 48	3. 1216	3 07 18	3. 1133	3 06 48	3. 1049	3 06 18	1
2	3. 1264	3 07 35	3. 1180	3 07 05	3. 1097	3 06 35	3. 1015	3 06 06	2
3	3. 1229	3 07 22	3. 1146	3 06 53	3. 1063	3 06 23	3. 0980	3 05 53	3
4	3. 1195	3 07 10	3. 1112	3 06 40	3. 1029	3 06 10	3. 0946	3 05 41	4
5	3. 1160	3 06 58	3. 1078	3 06 28	3. 0995	3 05 58	3. 0911	3 05 28	5
6	3. 1125	3 06 45	3. 1044	3 06 16	3. 0960	3 05 46	3. 0877	3 05 16	6
7	3. 1091	3 06 33	3. 1009	3 06 03	3. 0925	3 05 33	3. 0843	3 05 04	7
8	3. 1057	3 06 21	3. 0974	3 05 51	3. 0891	3 05 21	3. 0810	3 04 52	8
9	3. 1023	3 06 08	3. 0941	3 05 39	3. 0858	3 05 09	3. 0776	3 04 39	9
10	3. 0989	3 05 56	3. 0907	3 05 27	3. 0824	3 04 57	3. 0742	3 04 27	10
11	3. 0955	3 05 44	3. 0873	3 05 14	3. 0790	3 04 44	3. 0708	3 04 14	11
12	3. 0922	3 05 32	3. 0839	3 05 02	3. 0757	3 04 32	3. 0674	3 04 02	12
13	3. 0887	3 05 19	3. 0805	3 04 50	3. 0723	3 04 20	3. 0641	3 03 50	13
14	3. 0852	3 05 07	3. 0772	3 04 38	3. 0689	3 04 08	3. 0606	3 03 38	14
15	3. 0819	3 04 55	3. 0738	3 04 26	3. 0656	3 03 56	3. 0574	3 03 26	15
16	3. 0786	3 04 43	3. 0705	3 04 14	3. 0622	3 03 44	3. 0540	3 03 14	16
17	3. 0752	3 04 31	3. 0671	3 04 02	3. 0589	3 03 32	3. 0507	3 03 02	17
18	3. 0719	3 04 19	3. 0638	3 03 50	3. 0556	3 03 20	3. 0474	3 02 50	18
19	3. 0685	3 04 07	3. 0604	3 03 37	3. 0521	3 03 08	3. 0441	3 02 38	19
20	3. 0652	3 03 55	3. 0571	3 03 25	3. 0489	3 02 56	3. 0408	3 02 27	20
21	3. 0619	3 03 43	3. 0537	3 03 13	3. 0456	3 02 43	3. 0374	3 02 15	21
22	3. 0586	3 03 31	3. 0505	3 03 01	3. 0422	3 02 31	3. 0342	3 02 04	22
23	3. 0553	3 03 19	3. 0472	3 02 50	3. 0390	3 02 19	3. 0309	3 01 52	23
24	3. 0520	3 03 07	3. 0440	3 02 38	3. 0357	3 02 08	3. 0276	3 01 40	24
25	3. 0487	3 02 55	3. 0407	3 02 26	3. 0324	3 01 56	3. 0244	3 01 28	25
26	3. 0453	3 02 43	3. 0373	3 02 14	3. 0292	3 01 45	3. 0210	3 01 16	26
27	3. 0420	3 02 31	3. 0340	3 02 02	3. 0258	3 01 33	3. 0178	3 01 04	27
28	3. 0388	3 02 20	3. 0307	3 01 51	3. 0226	3 01 21	3. 0145	3 00 52	28
29	3. 0355	3 02 08	3. 0275	3 01 39	3. 0193	3 01 09	3. 0113	3 00 40	29
30	3. 0323	3 01 56	3. 0243	3 01 27	3. 0161	3 00 58	3. 0081	3 00 29	30
31	3. 0290	3 01 44	3. 0210	3 01 15	3. 0128	3 00 46	3. 0048	3 00 17	31
32	3. 0257	3 01 33	3. 0177	3 01 03	3. 0096	3 00 34	3. 0016	3 00 06	32
33	3. 0226	3 01 21	3. 0146	3 00 52	3. 0065	3 00 23	2. 9984	2 59 55	33
34	3. 0193	3 01 09	3. 0113	3 00 41	3. 0032	3 00 12	2. 9952	2 59 43	34
35	3. 0161	3 00 58	3. 0081	3 00 29	3. 0000	3 00 00	2. 9920	2 59 31	35
36	3. 0128	3 00 46	3. 0049	3 00 18	2. 9967	2 59 49	2. 9887	2 59 19	36
37	3. 0096	3 00 35	3. 0016	3 00 06	2. 9936	2 59 38	2. 9856	2 59 08	37
38	3. 0064	3 00 23	2. 9985	2 59 55	2. 9904	2 59 26	2. 9824	2 58 57	38
39	3. 0032	3 00 12	2. 9953	2 59 43	2. 9872	2 59 14	2. 9792	2 58 45	39
40	3. 0000	3 00 00	2. 9920	2 59 31	2. 9840	2 59 02	2. 9761	2 58 34	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$8^h\ 54^m\ 00^s$		$8^h\ 54^m\ 30^s$		$8^h\ 55^m\ 00^s$		$8^h\ 55^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	3. 0967	3 05 47	3. 0883	3 05 18	3. 0799	3 04 48	3. 0717	3 04 18	1
2	3. 0930	3 05 34	3. 0849	3 05 06	3. 0764	3 04 35	3. 0681	3 04 05	2
3	3. 0896	3 05 22	3. 0814	3 04 53	3. 0732	3 04 23	3. 0648	3 03 53	3
4	3. 0862	3 05 10	3. 0780	3 04 41	3. 0697	3 04 10	3. 0614	3 03 41	4
5	3. 0829	3 04 58	3. 0746	3 04 29	3. 0662	3 03 58	3. 0581	3 03 29	5
6	3. 0795	3 04 46	3. 0711	3 04 16	3. 0629	3 03 46	3. 0547	3 03 17	6
7	3. 0761	3 04 34	3. 0678	3 04 04	3. 0594	3 03 33	3. 0514	3 03 05	7
8	3. 0726	3 04 21	3. 0644	3 03 52	3. 0561	3 03 21	3. 0480	3 02 53	8
9	3. 0693	3 04 09	3. 0611	3 03 40	3. 0528	3 03 10	3. 0447	3 02 41	9
10	3. 0659	3 03 57	3. 0577	3 03 28	3. 0494	3 02 58	3. 0413	3 02 29	10
11	3. 0624	3 03 45	3. 0544	3 03 16	3. 0461	3 02 46	3. 0379	3 02 17	11
12	3. 0592	3 03 33	3. 0510	3 03 04	3. 0428	3 02 34	3. 0346	3 02 05	12
13	3. 0559	3 03 21	3. 0477	3 02 52	3. 0394	3 02 21	3. 0313	3 01 53	13
14	3. 0525	3 03 09	3. 0443	3 02 40	3. 0360	3 02 09	3. 0279	3 01 41	14
15	3. 0492	3 02 57	3. 0410	3 02 28	3. 0327	3 01 57	3. 0243	3 01 29	15
16	3. 0458	3 02 45	3. 0376	3 03 17	3. 0294	3 01 45	3. 0213	3 01 17	16
17	3. 0425	3 02 33	3. 0343	3 02 05	3. 0261	3 01 33	3. 0179	3 01 05	17
18	3. 0392	3 02 21	3. 0311	3 01 53	3. 0228	3 01 22	3. 0147	3 00 53	18
19	3. 0359	3 02 09	3. 0278	3 01 41	3. 0195	3 01 10	3. 0115	3 00 41	19
20	3. 0326	3 01 57	3. 0245	3 01 29	3. 0162	3 00 58	3. 0083	3 00 29	20
21	3. 0293	3 01 46	3. 0213	3 01 17	3. 0129	3 00 46	3. 0049	3 00 18	21
22	3. 0259	3 01 34	3. 0179	3 01 05	3. 0097	3 00 34	3. 0016	3 00 06	22
23	3. 0227	3 01 22	3. 0146	3 00 53	3. 0065	3 00 23	2. 9985	2 59 55	23
24	3. 0195	3 01 10	3. 0114	3 00 42	3. 0033	3 00 11	2. 9953	2 59 43	24
25	3. 0162	3 00 58	3. 0082	3 00 31	2. 9999	3 00 00	2. 9919	2 59 31	25
26	3. 0129	3 00 46	3. 0049	3 00 19	2. 9967	2 59 48	2. 9886	2 59 19	26
27	3. 0096	3 00 34	3. 0016	3 00 07	2. 9935	2 59 36	2. 9855	2 59 08	27
28	3. 0064	3 00 23	2. 9984	2 59 55	2. 9903	2 59 25	2. 9823	2 58 56	28
29	3. 0032	3 00 11	2. 9952	2 59 43	2. 9871	2 59 13	2. 9789	2 58 44	29
30	2. 9999	3 00 00	2. 9919	2 59 31	2. 9839	2 59 02	2. 9758	2 58 33	30
31	2. 9967	2 59 48	2. 9887	2 59 19	2. 9806	2 58 51	2. 9726	2 58 21	31
32	2. 9935	2 59 37	2. 9855	2 59 08	2. 9774	2 58 39	2. 9693	2 58 09	32
33	2. 9903	2 59 25	2. 9823	2 58 56	2. 9742	2 58 27	2. 9661	2 57 58	33
34	2. 9871	2 59 14	2. 9791	2 58 45	2. 9710	2 58 15	2. 9630	2 57 47	34
35	2. 9839	2 59 02	2. 9759	2 58 34	2. 9679	2 58 04	2. 9600	2 57 36	35
36	2. 9807	2 58 50	2. 9727	2 58 23	2. 9647	2 57 53	2. 9568	2 57 24	36
37	2. 9776	2 58 39	2. 9696	2 58 11	2. 9614	2 57 41	2. 9536	2 57 13	37
38	2. 9744	2 58 28	2. 9664	2 58 00	2. 9582	2 57 30	2. 9504	2 57 01	38
39	2. 9712	2 58 16	2. 9632	2 57 48	2. 9551	2 57 19	2. 9473	2 56 50	39
40	2. 9680	2 58 05	2. 9601	2 57 36	2. 9521	2 57 08	2. 9441	2 56 39	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$8^h\ 56^m\ 00^s$		$8^h\ 56^m\ 30^s$		$8^h\ 57^m\ 00^s$		$8^h\ 57^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	3. 0634	3 03 48	3. 0549	3 03 18	3. 0466	3 02 48	3. 0383	3 02 18	1
2	3. 0599	3 03 35	3. 0516	3 03 06	3. 0432	3 02 36	3. 0349	3 02 06	2
3	3. 0564	3 03 23	3. 0482	3 02 53	3. 0399	3 02 24	3. 0315	3 01 54	3
4	3. 0531	3 03 11	3. 0448	3 02 41	3. 0364	3 02 11	3. 0282	3 01 42	4
5	3. 0497	3 02 58	3. 0414	3 02 29	3. 0331	3 01 59	3. 0248	3 01 29	5
6	3. 0463	3 02 46	3. 0381	3 02 17	3. 0298	3 01 47	3. 0215	3 01 17	6
7	3. 0430	3 02 34	3. 0346	3 02 05	3. 0264	3 01 35	3. 0182	3 01 05	7
8	3. 0397	3 02 22	3. 0313	3 01 53	3. 0231	3 01 23	3. 0148	3 00 53	8
9	3. 0363	3 02 10	3. 0281	3 01 41	3. 0198	3 01 11	3. 0116	3 00 42	9
10	3. 0330	3 01 58	3. 0247	3 01 29	3. 0165	3 00 59	3. 0083	3 00 30	10
11	3. 0296	3 01 46	3. 0214	3 01 16	3. 0131	3 00 47	3. 0049	3 00 18	11
12	3. 0263	3 01 34	3. 0182	3 01 04	3. 0098	3 00 35	3. 0017	3 00 06	12
13	3. 0229	3 01 22	3. 0148	3 00 52	3. 0066	3 00 24	2. 9984	2 59 54	13
14	3. 0196	3 01 10	3. 0115	3 00 41	3. 0033	3 00 12	2. 9950	2 59 42	14
15	3. 0164	3 00 59	3. 0083	3 00 29	3. 0000	3 00 00	2. 9918	2 59 30	15
16	3. 0132	3 00 47	3. 0049	3 00 17	2. 9967	2 59 48	2. 9885	2 59 19	16
17	3. 0098	3 00 35	3. 0016	3 00 05	2. 9935	2 59 37	2. 9853	2 59 07	17
18	3. 0066	3 00 23	2. 9984	2 59 54	2. 9902	2 59 25	2. 9820	2 58 55	18
19	3. 0033	3 00 11	2. 9952	2 59 42	2. 9869	2 59 13	2. 9788	2 58 44	19
20	3. 0001	3 00 00	2. 9919	2 59 30	2. 9837	2 59 01	2. 9755	2 58 32	20
21	2. 9968	2 59 48	2. 9886	2 59 18	2. 9804	2 58 49	2. 9723	2 58 20	21
22	2. 9935	2 59 36	2. 9854	2 59 07	2. 9772	2 58 38	2. 9691	2 58 09	22
23	2. 9902	2 59 24	2. 9822	2 58 55	2. 9740	2 58 26	2. 9659	2 57 57	23
24	2. 9870	2 59 12	2. 9789	2 58 44	2. 9708	2 58 15	2. 9627	2 57 46	24
25	2. 9838	2 59 01	2. 9757	2 58 32	2. 9675	2 58 03	2. 9594	2 57 34	25
26	2. 9806	2 58 50	2. 9725	2 58 21	2. 9643	2 57 51	2. 9563	2 57 23	26
27	2. 9774	2 58 38	2. 9693	2 58 09	2. 9611	2 57 40	2. 9530	2 57 11	27
28	2. 9741	2 58 26	2. 9660	2 57 57	2. 9579	2 57 28	2. 9499	2 57 00	28
29	2. 9710	2 58 15	2. 9629	2 57 46	2. 9548	2 57 17	2. 9467	2 56 48	29
30	2. 9678	2 58 04	2. 9597	2 57 34	2. 9516	2 57 06	2. 9435	2 56 37	30
31	2. 9646	2 57 52	2. 9565	2 57 23	2. 9484	2 56 54	2. 9403	2 56 25	31
32	2. 9614	2 57 40	2. 9534	2 57 12	2. 9452	2 56 43	2. 9372	2 56 14	32
33	2. 9582	2 57 29	2. 9502	2 57 00	2. 9421	2 56 32	2. 9340	2 56 02	33
34	2. 9550	2 57 18	2. 9471	2 56 49	2. 9389	2 56 20	2. 9309	2 55 51	34
35	2. 9519	2 57 06	2. 9439	2 56 38	2. 9358	2 56 09	2. 9278	2 55 40	35
36	2. 9487	2 56 54	2. 9408	2 56 26	2. 9326	2 55 57	2. 9246	2 55 29	36
37	2. 9456	2 56 43	2. 9376	2 56 15	2. 9295	2 55 46	2. 9215	2 55 18	37
38	2. 9424	2 56 32	2. 9345	2 56 04	2. 9264	2 55 35	2. 9185	2 55 07	38
39	2. 9392	2 56 21	2. 9313	2 55 52	2. 9233	2 55 24	2. 9153	2 54 55	39
40	2. 9361	2 56 10	2. 9282	2 55 40	2. 9202	2 55 13	2. 9122	2 54 44	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$8^h\ 58^m\ 00^s$		$8^h\ 58^m\ 30^s$		$8^h\ 59^m\ 00^s$		$8^h\ 59^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
'	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	'
1	3.0300	3 01 47	3.0217	3 01 18	3.0133	3 00 48	3.0050	3 00 18	1
2	3.0266	3 01 35	3.0183	3 01 06	3.0100	3 00 36	3.0017	3 00 06	2
3	3.0232	3 01 23	3.0149	3 00 54	3.0066	3 00 24	2.9984	2 59 54	3
4	3.0198	3 01 11	3.0116	3 00 42	3.0033	3 00 12	2.9950	2 59 42	4
5	3.0165	3 00 59	3.0084	3 00 30	3.0000	3 00 00	2.9917	2 59 30	5
6	3 0132	3 00 47	3.0050	3 00 18	2.9967	2 59 48	2.9884	2 59 18	6
7	3.0098	3 00 35	3.0017	3 00 06	2.9933	2 59 36	2.9852	2 59 06	7
8	3.0066	3 00 24	2.9984	2 59 54	2.9900	2 59 24	2.9818	2 58 54	8
9	3.0032	3 00 12	2.9951	2 59 42	2.9868	2 59 12	2.9786	2 58 43	9
10	3.0000	3 00 00	2.9918	2 59 30	2.9835	2 59 00	2.9753	2 58 31	10
11	2.9967	2 59 48	2.9885	2 59 19	2.9802	2 58 49	2.9721	2 58 20	11
12	2.9935	2 59 36	2.9853	2 59 07	2.9769	2 58 37	2.9687	2 58 08	12
13	2.9901	2 59 24	2.9819	2 58 55	2.9737	2 58 26	2.9656	2 57 56	13
14	2.9868	2 59 12	2.9787	2 58 43	2.9704	2 58 14	2.9622	2 57 44	14
15	2.9836	2 59 01	2.9754	2 58 31	2.9671	2 58 02	2.9590	2 57 32	15
16	2.9803	2 58 49	2.9722	2 58 20	2.9639	2 57 50	2.9558	2 57 21	16
17	2.9771	2 58 38	2.9689	2 58 08	2.9606	2 57 38	2.9526	2 57 09	17
18	2.9738	2 58 26	2.9658	2 57 57	2.9574	2 57 27	2.9494	2 56 57	18
19	2.9705	2 58 14	2.9625	2 57 45	2.9542	2 57 15	2.9462	2 56 46	19
20	2.9673	2 58 03	2.9592	2 57 33	2.9511	2 57 04	2.9430	2 56 35	20
21	2.9641	2 57 51	2.9560	2 57 22	2.9478	2 56 52	2.9398	2 56 23	21
22	2.9609	2 57 39	2.9528	2 57 10	2.9447	2 56 41	2.9366	2 56 11	22
23	2.9578	2 57 28	2.9496	2 56 59	2.9415	2 56 30	2.9334	2 56 00	23
24	2.9546	2 57 17	2.9465	2 56 47	2.9383	2 56 18	2.9303	2 55 49	24
25	2.9513	2 57 05	2.9433	2 56 36	2.9351	2 56 06	2.9270	2 55 37	25
26	2.9482	2 56 54	2.9401	2 56 24	2.9319	2 55 55	2.9239	2 55 26	26
27	2.9449	2 56 42	2.9369	2 56 13	2.9288	2 55 44	2.9207	2 55 14	27
28	2.9418	2 56 30	2.9337	3 56 01	2.9256	2 55 32	2.9175	2 55 03	28
29	2.9386	2 56 19	2.9306	2 55 50	2.9225	2 55 21	2.9144	2 54 52	29
30	2.9355	2 56 08	2.9274	2 55 39	2.9194	2 55 10	2.9113	2 54 41	30
31	2.9323	2 55 56	2.9241	2 55 27	2.9162	2 54 58	2.9081	2 54 29	31
32	2.9291	2 55 45	2.9210	2 55 16	2.9131	2 54 47	2.9051	2 54 18	32
33	2.9260	2 55 34	2.9180	2 55 05	2.9100	2 54 36	2.9020	2 54 07	33
34	2.9229	2 55 22	2.9149	2 54 54	2.9069	2 54 25	2.8988	2 53 56	34
35	2.9198	2 55 11	2.9118	2 54 42	2.9037	2 54 13	2.8957	2 53 45	35
36	2.9166	2 55 00	2.9086	2 54 31	2.9007	2 54 02	2.8926	2 53 33	36
37	2.9135	2 54 49	2.9056	2 54 20	2.8976	2 53 51	2.8895	2 53 22	37
38	2.9104	2 54 38	2.9025	2 54 09	2.8945	2 53 40	2.8865	2 53 11	38
39	2.9073	2 54 26	2.8993	2 53 58	2.8914	2 53 29	2.8834	2 53 00	39
40	2.9043	2 54 15	2.8963	2 53 47	2.8883	2 53 18	2.8803	2 52 49	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$9^h\ 00^m\ 00^s$		$9^h\ 00^m\ 30^s$		$9^h\ 01^m\ 00^s$		$9^h\ 01^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	2.9967	2 59 48	2.9885	2 59 18	2.9800	2 58 48	2.9717	2 58 18	1
2	2.9934	2 59 36	2.9852	2 59 06	2.9767	2 58 36	2.9684	2 58 06	2
3	2.9900	2 59 24	2.9818	2 58 54	2.9734	2 58 24	2.9651	2 57 54	3
4	2.9867	2 59 12	2.9785	2 58 43	2.9701	2 58 12	2.9618	2 57 42	4
5	2.9834	2 59 00	2.9752	2 58 31	2.9669	2 58 01	2.9585	2 57 31	5
6	2.9800	2 58 48	2.9719	2 58 19	2.9636	2 57 49	2.9553	2 57 19	6
7	2.9768	2 58 37	2.9686	2 58 07	2.9603	2 57 37	2.9520	2 57 07	7
8	2.9735	2 58 25	2.9654	2 57 55	2.9570	2 57 25	2.9487	2 56 55	8
9	2.9703	2 58 13	2.9622	2 57 43	2.9538	2 57 13	2.9455	2 56 44	9
10	2.9671	2 58 01	2.9589	2 57 32	2.9506	2 57 01	2.9422	2 56 32	10
11	2.9638	2 57 49	2.9556	2 57 20	2.9473	2 56 50	2.9390	2 56 21	11
12	2.9604	2 57 37	2.9524	2 57 09	2.9440	2 56 38	2.9358	2 56 09	12
13	2.9572	2 57 26	2.9492	2 56 57	2.9407	2 56 26	2.9326	2 55 57	13
14	2.9539	2 57 14	2.9460	2 56 46	2.9374	2 56 15	2.9295	2 55 46	14
15	2.9507	2 57 03	2.9427	2 56 34	2.9342	2 56 03	2.9262	2 55 35	15
16	2.9475	2 56 51	2.9394	2 56 22	2.9310	2 55 52	2.9229	2 55 23	16
17	2.9443	2 56 39	2.9362	2 56 11	2.9278	2 55 40	2.9197	2 55 11	17
18	2.9412	2 56 28	2.9329	2 56 00	2.9246	2 55 29	2.9166	2 55 00	18
19	2.9380	2 56 16	2.9297	2 55 48	2.9215	2 55 17	2.9134	2 54 49	19
20	2.9348	2 56 05	2.9266	2 55 36	2.9184	2 55 06	2.9103	2 54 37	20
21	2.9316	2 55 54	2.9235	2 55 25	2.9152	2 54 55	2.9072	2 54 25	21
22	2.9284	2 55 42	2.9203	2 55 13	2.9121	2 54 44	2.9041	2 54 14	22
23	2.9252	2 55 31	2.9172	2 55 02	2.9089	2 54 32	2.9010	2 54 03	23
24	2.9220	2 55 19	2.9141	2 54 51	2.9057	2 54 20	2.8978	2 53 52	24
25	2.9189	2 55 08	2.9109	2 54 39	2.9026	2 54 09	2.8946	2 53 40	25
26	2.9157	2 54 56	2.9078	2 54 28	2.8995	2 53 58	2.8915	2 53 29	26
27	2.9125	2 54 45	2.9046	2 54 17	2.8964	2 53 47	2.8883	2 53 18	27
28	2.9094	2 54 34	2.9015	2 54 06	2.8932	2 53 36	2.8852	2 53 07	28
29	2.9063	2 54 23	2.8984	2 53 54	2.8901	2 53 25	2.8821	2 52 56	29
30	2.9032	2 54 12	2.8953	2 53 43	2.8871	2 53 14	2.8791	2 52 45	30
31	2.9001	2 54 00	2.8921	2 53 32	2.8839	2 53 02	2.8760	2 52 33	31
32	2.8969	2 53 49	2.8890	2 53 21	2.8808	2 52 51	2.8729	2 52 22	32
33	2.8938	2 53 38	2.8860	2 53 10	2.8777	2 52 40	2.8698	2 52 11	33
34	2.8908	2 53 27	2.8829	2 52 58	2.8746	2 52 29	2.8667	2 52 00	34
35	2.8877	2 53 16	2.8798	2 52 47	2.8716	2 52 18	2.8637	2 51 49	35
36	2.8846	2 53 04	2.8767	2 52 36	2.8686	2 52 07	2.8606	2 51 38	36
37	2.8815	2 53 53	2.8736	2 52 25	2.8655	2 51 56	2.8575	2 51 27	37
38	2.8784	2 52 42	2.8705	2 52 14	2.8625	2 51 45	2.8544	2 51 16	38
39	2.8753	2 52 31	2.8674	2 52 03	2.8594	2 51 34	2.8514	2 51 05	39
40	2.8723	2 52 20	2.8644	2 51 52	2.8564	2 51 23	2.8484	2 50 54	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$9^h\ 02^m\ 00^s$		$9^h\ 02^m\ 30^s$		$9^h\ 03^m\ 00^s$		$9^h\ 03^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	2. 9634	2 57 48	2. 9551	2 57 18	2. 9467	2 56 48	2. 9384	2 56 18	1
2	2. 9601	2 57 37	2. 9518	2 57 06	2. 9434	2 56 36	2. 9351	2 56 06	2
3	2. 9568	2 57 26	2. 9485	2 56 55	2. 9402	2 56 24	2. 9319	2 55 55	3
4	2. 9535	2 57 14	2. 9452	2 56 43	2. 9370	2 56 13	2. 9286	2 55 43	4
5	2. 9503	2 57 02	2. 9420	2 56 31	2. 9337	2 56 01	2. 9254	2 55 31	5
6	2. 9471	2 56 50	2. 9387	2 56 19	2. 9304	2 55 49	2. 9221	2 55 20	6
7	2. 9438	2 56 38	2. 9355	2 56 08	2. 9272	2 55 37	2. 9190	2 55 08	7
8	2. 9406	2 56 26	2. 9322	2 55 56	2. 9239	2 55 25	2. 9157	2 54 56	8
9	2. 9373	2 56 14	2. 9290	2 55 44	2. 9207	2 55 14	2. 9125	2 54 45	9
10	2. 9340	2 56 02	2. 9258	2 55 33	2. 9177	2 55 03	2. 9093	2 54 34	10
11	2. 9308	2 55 51	2. 9226	2 55 22	2. 9144	2 54 51	2. 9061	2 54 22	11
12	2. 9277	2 55 39	2. 9194	2 55 10	2. 9111	2 54 39	2. 9029	2 54 10	12
13	2. 9244	2 55 28	2. 9162	2 54 58	2. 9079	2 54 28	2. 8998	2 53 59	13
14	2. 9211	2 55 16	2. 9130	2 54 47	2. 9048	2 54 17	2. 8966	2 53 48	14
15	2. 9180	2 55 04	2. 9098	2 54 36	2. 9015	2 54 05	2. 8934	2 53 36	15
16	2. 9148	2 54 53	2. 9066	2 54 24	2. 8984	2 53 54	2. 8902	2 53 25	16
17	2. 9117	2 54 42	2. 9035	2 54 13	2. 8953	2 53 43	2. 8871	2 53 14	17
18	2. 9085	2 54 31	2. 9003	2 54 01	2. 8921	2 53 32	2. 8840	2 53 02	18
19	2. 9053	2 54 19	2. 8971	2 53 49	2. 8890	2 53 20	2. 8808	2 52 51	19
20	2. 9022	2 54 08	2. 8940	2 53 38	2. 8858	2 53 08	2. 8777	2 52 39	20
21	2. 8990	2 53 56	2. 8909	2 53 27	2. 8826	2 52 57	2. 8746	2 52 28	21
22	2. 8959	2 53 45	2. 8878	2 53 16	2. 8796	2 52 46	2. 8715	2 52 17	22
23	2. 8927	2 53 34	2. 8846	2 53 05	2. 8765	2 52 35	2. 8684	2 52 06	23
24	2. 8896	2 53 23	2. 8815	2 52 53	2. 8734	2 52 24	2. 8653	2 51 55	24
25	2. 8865	2 53 11	2. 8784	2 52 42	2. 8703	2 52 13	2. 8622	2 51 44	25
26	2. 8834	2 53 00	2. 8752	2 52 31	2. 8672	2 52 01	2. 8591	2 51 33	26
27	2. 8802	2 52 49	2. 8721	2 52 20	2. 8641	2 51 50	2. 8560	2 51 22	27
28	2. 8771	2 52 38	2. 8690	2 52 08	2. 8610	2 51 39	2. 8529	2 51 11	28
29	2. 8740	2 52 27	2. 8660	2 51 57	2. 8579	2 51 28	2. 8498	2 50 59	29
30	2. 8710	2 52 16	2. 8630	2 51 46	2. 8548	2 51 17	2. 8468	2 50 48	30
31	2. 8678	2 52 05	2. 8599	2 51 35	2. 8517	2 51 06	2. 8437	2 50 37	31
32	2. 8648	2 51 53	2. 8568	2 51 24	2. 8486	2 50 55	2. 8406	2 50 26	32
33	2. 8617	2 51 42	2. 8537	2 51 13	2. 8456	2 50 44	3. 8376	2 50 15	33
34	2. 8587	2 51 31	2. 8506	2 51 02	2. 8426	2 50 33	2. 8345	2 50 04	34
35	2. 8556	2 51 20	2. 8476	2 50 51	2. 8396	2 50 22	2. 8315	2 49 53	35
36	2. 8525	2 51 09	2. 8446	2 50 40	2. 8365	2 50 11	2. 8285	2 49 42	36
37	2. 8494	2 50 57	2. 8415	2 50 29	2. 8335	2 50 00	2. 8255	2 49 32	37
38	2. 8463	2 50 46	2. 8385	2 50 19	2. 8305	2 49 49	2. 8225	2 49 21	38
39	2. 8433	2 50 36	2. 8354	2 50 08	2. 8274	2 49 39	2. 8195	2 49 10	39
40	2. 8404	2 50 25	2. 8324	2 49 57	2. 8244	2 49 29	2. 8165	2 49 00	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$9^h\ 04^m\ 00^s$		$9^h\ 04^m\ 30^s$		$9^h\ 05^m\ 00^s$		$9^h\ 05^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	2. 9301	2 55 48	2. 9217	2 55 18	2. 9134	2 54 48	2. 9051	2 54 19	1
2	2. 9268	2 55 36	2. 9185	2 55 07	2. 9102	2 54 37	2. 9019	2 54 07	2
3	2. 9236	2 55 24	2. 9152	2 54 55	2. 9069	2 54 25	2. 8987	2 53 55	3
4	2. 9203	2 55 13	2. 9120	2 54 43	2. 9037	2 54 13	2. 8955	2 53 44	4
5	2. 9170	2 55 01	2. 9088	2 54 32	2. 9006	2 54 02	2. 8923	2 53 32	5
6	2. 9139	2 54 50	2. 9055	2 54 20	2. 8973	2 53 50	2. 8891	2 53 21	6
7	2. 9107	2 54 38	2. 9023	2 54 08	2. 8942	2 53 39	2. 8859	2 53 09	7
8	2. 9075	2 54 27	2. 8992	2 53 57	2. 8910	2 53 28	2. 8827	2 52 58	8
9	2. 9043	2 54 15	2. 8960	2 53 45	2. 8878	2 53 16	2. 8796	2 52 47	9
10	2. 9011	2 54 03	2. 8928	2 53 34	2. 8846	2 53 05	2. 8765	2 52 35	10
11	2. 8979	2 53 52	2. 8896	2 53 23	2. 8814	2 52 53	2. 8732	2 52 24	11
12	2. 8947	2 53 40	2. 8865	2 53 11	2. 8783	2 52 42	2. 8701	2 52 12	12
13	2. 8915	2 53 29	2. 8834	2 53 00	2. 8752	2 52 31	2. 8670	2 52 01	13
14	2. 8883	2 53 17	2. 8802	2 52 48	2. 8720	2 52 19	2. 8638	2 51 50	14
15	2. 8852	2 53 06	2. 8770	2 52 36	2. 8789	2 52 08	2. 8607	2 51 39	15
16	2. 8821	2 52 55	2. 8738	2 52 25	2. 8657	2 51 57	2. 8575	2 51 27	16
17	2. 8789	2 52 44	2. 8707	2 52 14	2. 8627	2 51 46	2. 8544	2 51 16	17
18	2. 8758	2 52 32	2. 8676	2 52 03	2. 8595	2 51 34	2. 8513	2 51 05	18
19	2. 8726	2 52 21	2. 8645	2 51 51	2. 8563	2 51 23	2. 8482	2 50 54	19
20	2. 8695	2 52 10	2. 8614	2 51 40	2. 8532	2 51 12	2. 8451	2 50 42	20
21	2. 8664	2 51 59	2. 8582	2 51 29	2. 8502	2 51 01	2. 8421	2 50 31	21
22	2. 8633	2 51 48	2. 8551	2 51 18	2. 8470	2 50 49	2. 8390	2 50 20	22
23	2. 8602	2 51 37	2. 8521	2 51 07	2. 8440	2 50 38	2. 8359	2 50 09	23
24	2. 8571	2 51 25	2. 8490	2 50 56	2. 8410	2 50 27	2. 8328	2 49 58	24
25	2. 8540	2 51 14	2. 8460	2 50 45	2. 8378	2 50 16	2. 8297	2 49 47	25
26	2. 8509	2 51 03	2. 8430	2 50 34	2. 8348	2 50 05	2. 8267	2 49 36	26
27	2. 8479	2 50 52	2. 8399	2 50 23	2. 8317	2 49 54	2. 8236	2 49 25	27
28	2. 8448	2 50 41	2. 8368	2 50 13	2. 8286	2 49 43	2. 8206	2 49 14	28
29	2. 8417	2 50 30	2. 8337	2 50 02	2. 8256	2 49 32	2. 8175	2 49 03	29
30	2. 8387	2 50 19	2. 8306	2 49 51	2. 8226	2 49 21	2. 8146	2 48 52	30
31	2. 8356	2 50 08	2. 8276	2 49 40	2. 8195	2 49 10	2. 8115	2 48 41	31
32	2. 8325	2 49 57	2. 8246	2 49 29	2. 8165	2 48 59	2. 8085	2 48 31	32
33	2. 8295	2 49 46	2. 8216	2 49 18	2. 8135	2 48 49	2. 8055	2 48 20	33
34	2. 8266	2 49 35	2. 8185	2 49 07	2. 8105	2 48 38	2. 8025	2 48 09	34
35	2. 8235	2 49 24	2. 8155	2 48 56	2. 8075	2 48 27	2. 7995	2 47 58	35
36	2. 8204	2 49 13	2. 8125	2 48 45	2. 8045	2 48 16	2. 7965	2 47 47	36
37	2. 8175	2 49 03	2. 8096	2 48 34	2. 8015	2 48 05	2. 7936	2 47 37	37
38	2. 8145	2 48 52	2. 8065	2 48 23	2. 7985	2 47 55	2. 7906	2 47 26	38
39	2. 8115	2 48 41	2. 8035	2 48 12	2. 7955	2 47 44	2. 7875	2 47 15	39
40	2. 8085	2 48 31	2. 8005	2 48 02	2. 7926	2 47 33	2. 7845	2 47 04	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$9^h\ 06^m\ 00^s$		$9^h\ 06^m\ 30^s$		$9^h\ 07^m\ 00^s$		$9^h\ 07^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	2. 8968	2 53 48	2. 8884	2 53 18	2. 8802	2 52 49	2. 8718	2 53 19	1
2	2. 8936	2 53 37	2. 8852	2 53 06	2. 8770	2 52 37	2. 8686	2 53 07	2
3	2. 8903	2 53 25	2. 8821	2 52 55	2. 8737	2 52 25	2. 8655	2 52 56	3
4	2. 8871	2 53 13	2. 8789	2 52 44	2. 8705	2 52 14	2. 8622	2 52 44	4
5	2. 8839	2 53 02	2. 8756	2 52 32	2. 8674	2 52 03	2. 8591	2 52 33	5
6	2. 8808	2 52 51	2. 8725	2 52 21	2. 8642	2 51 51	2. 8560	2 52 21	6
7	2. 8776	2 52 39	2. 8693	2 52 09	2. 8610	2 51 40	2. 8528	2 52 09	7
8	2. 8744	2 52 28	2. 8662	2 51 58	2. 8579	2 51 29	2. 8496	2 51 58	8
9	2. 8713	2 52 16	2. 8631	2 51 47	2. 8548	2 51 17	2. 8465	2 51 47	9
10	2. 8681	2 52 05	2. 8599	2 51 36	2. 8517	2 51 06	2. 8435	2 51 36	10
11	2. 8650	2 51 54	2. 8567	2 51 24	2. 8486	2 50 54	2. 8404	2 51 25	11
12	2. 8619	2 51 43	2. 8536	2 51 12	2. 8455	2 50 43	2. 8372	2 51 14	12
13	2. 8587	2 51 31	2. 8505	2 51 01	2. 8423	2 50 32	2. 8340	2 51 02	13
14	2. 8555	2 51 20	2. 8473	2 50 50	2. 8392	2 50 20	2. 8309	2 50 51	14
15	2. 8525	2 51 09	2. 8442	2 50 39	2. 8361	2 50 09	2. 8279	2 50 40	15
16	2. 8493	2 50 58	2. 8411	2 50 28	2. 8330	2 49 58	2. 8248	2 50 29	16
17	2. 8462	2 50 46	2. 8381	2 50 17	2. 8299	2 49 47	2. 8217	2 50 18	17
18	2. 8432	2 50 35	2. 8350	2 50 06	2. 8268	2 49 36	2. 8186	2 50 07	18
19	2. 8400	2 50 24	2. 8318	2 49 55	2. 8237	2 49 25	2. 8156	2 49 56	19
20	2. 8369	2 50 13	2. 8288	2 49 44	2. 8206	2 49 14	2. 8125	2 49 45	20
21	2. 8339	2 50 02	2. 8257	2 49 33	2. 8176	2 49 03	2. 8095	2 49 34	21
22	2. 8308	2 49 51	2. 8227	2 49 22	2. 8145	2 48 52	2. 8064	2 48 23	22
23	2. 8278	2 49 40	2. 8196	2 49 10	2. 8115	2 48 41	2. 8033	2 48 12	23
24	2. 8247	2 49 29	2. 8165	2 48 59	2. 8085	2 48 30	2. 8003	2 48 01	24
25	2. 8217	2 49 18	2. 8135	2 48 49	2. 8055	2 48 19	2. 7973	2 47 50	25
26	2. 8186	2 49 07	2. 8105	2 48 38	2. 8024	2 48 09	2. 7943	2 47 39	26
27	2. 8155	2 48 56	2. 8074	2 48 27	2. 7993	2 47 58	2. 7913	2 47 29	27
28	2. 8125	2 48 45	2. 8044	2 48 16	2. 7964	2 47 47	2. 7882	2 47 18	28
29	2. 8095	2 48 34	2. 8014	2 48 05	2. 7934	2 47 36	2. 7852	2 47 07	29
30	2. 8064	2 48 23	2. 7984	2 47 54	2. 7904	2 47 25	2. 7823	2 46 56	30
31	2. 8034	2 48 12	2. 7953	2 47 43	2. 7873	2 47 14	2. 7792	2 46 45	31
32	2. 8004	2 48 01	2. 7923	2 47 32	2. 7843	2 47 03	2. 7762	2 46 34	32
33	2. 7975	2 47 51	2. 7894	2 47 22	2. 7814	2 46 53	2. 7732	2 46 24	33
34	2. 7944	2 47 40	2. 7864	2 47 11	2. 7784	2 46 42	2. 7703	2 46 13	34
35	2. 7914	2 47 29	2. 7834	2 47 00	2. 7755	2 46 32	2. 7674	2 46 03	35
36	2. 7884	2 47 18	2. 7804	2 46 49	2. 7725	2 46 21	2. 7645	2 45 52	36
37	2. 7855	2 47 07	2. 7775	2 46 39	2. 7694	2 46 10	2. 7615	2 45 41	37
38	2. 7826	2 46 57	2. 7745	2 46 28	2. 7664	2 45 59	2. 7586	2 45 31	38
39	2. 7795	2 46 46	2. 7715	2 46 17	2. 7635	2 45 48	2. 7556	2 45 20	39
40	2. 7766	2 46 35	2. 7686	2 46 06	2. 7606	2 45 38	2. 7527	2 45 10	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$9^h\ 08^m\ 00^s$		$9^h\ 08^m\ 30^s$		$9^h\ 09^m\ 00^s$		$9^h\ 09^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
'	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	'
1	2.8635	2 51 49	2.8551	2 51 18	2.8468	2 50 48	2.8385	2 50 18	1
2	2.8603	2 51 37	2.8520	2 51 07	2.8437	2 50 37	2.8353	2 50 07	2
3	2.8571	2 51 25	2.8488	2 50 55	2.8406	2 50 26	2.8322	2 49 55	3
4	2.8540	2 51 13	2.8458	2 50 44	2.8374	2 50 15	2.8291	2 49 44	4
5	2.8508	2 51 02	2.8425	2 50 33	2.8343	2 50 03	2.8260	2 49 33	5
6	2.8477	2 50 51	2.8394	2 50 22	2.8311	2 49 52	2.8229	2 49 21	6
7	2.8445	2 50 40	2.8363	2 50 12	2.8280	2 49 41	2.8197	2 49 10	7
8	2.8414	2 50 29	2.8332	2 50 01	2.8249	2 49 30	2.8166	2 48 59	8
9	2.8383	2 50 18	2.8301	2 49 49	2.8218	2 49 18	2.8135	2 48 48	9
10	2.8352	2 50 07	2.8270	2 49 37	2.8187	2 49 07	2.8104	2 48 37	10
11	2.8320	2 49 55	2.8238	2 49 26	2.8156	2 48 56	2.8074	2 48 26	11
12	2.8290	2 49 44	2.8207	2 49 15	2.8125	2 48 45	2.8043	2 48 15	12
13	2.8258	2 49 33	2.8176	2 49 03	2.8095	2 48 34	2.8013	2 48 04	13
14	2.8227	2 49 22	2.8146	2 48 52	2.8063	2 48 23	2.7981	2 47 53	14
15	2.8196	2 49 11	2.8115	2 48 41	2.8033	2 48 12	2.7951	2 47 42	15
16	2.8166	2 49 00	2.8085	2 48 30	2.8002	2 48 01	2.7920	2 47 31	16
17	2.8135	2 48 49	2.8054	2 48 19	2.7972	2 47 50	2.7890	2 47 20	17
18	2.8104	2 48 38	2.8023	2 48 08	2.7941	2 47 39	2.7860	2 47 09	18
19	2.8074	2 48 27	2.7993	2 47 57	2.7910	2 47 28	2.7829	2 46 58	19
20	2.8044	2 48 16	2.7962	2 47 47	2.7880	2 47 17	2.7799	2 46 48	20
21	2.8013	2 48 04	2.7931	2 47 36	2.7850	2 47 06	2.7769	2 46 37	21
22	2.7983	2 47 54	2.7901	2 47 25	2.7820	2 46 55	2.7739	2 46 26	22
23	2.7953	2 47 43	2.7871	2 47 14	2.7790	2 46 44	2.7709	2 46 15	23
24	2.7922	2 47 33	2.7841	2 47 03	2.7760	2 46 34	2.7679	2 46 04	24
25	2.7892	2 47 22	2.7811	2 46 52	2.7730	2 46 23	2.7649	2 45 54	25
26	2.7863	2 47 11	2.7781	2 46 41	2.7700	2 46 12	2.7619	2 45 43	26
27	2.7833	2 47 00	2.7751	2 46 30	2.7670	2 46 01	2.7589	2 45 32	27
28	2.7802	2 46 50	2.7721	2 46 19	2.7640	2 45 50	2.7559	2 45 21	28
29	2.7772	2 46 39	2.7691	2 46 09	2.7610	2 45 40	2.7530	2 45 10	29
30	2.7742	2 46 28	2.7661	2 45 58	2.7581	2 45 29	2.7500	2 45 00	30
31	2.7713	2 46 17	2.7632	2 45 48	2.7551	2 45 18	2.7471	2 44 49	31
32	2.7683	2 46 06	2.7602	2 45 37	2.7521	2 45 07	2.7442	2 44 39	32
33	2.7653	2 45 55	2.7573	2 45 26	2.7492	2 44 57	2.7412	2 44 27	33
34	2.7623	2 45 44	2.7544	2 45 16	2.7463	2 44 47	2.7382	2 44 17	34
35	2.7593	2 45 34	2.7515	2 45 05	2.7433	2 44 36	2.7353	2 44 07	35
36	2.7563	2 45 23	2.7485	2 44 54	2.7403	2 44 25	2.7323	2 43 56	36
37	2.7534	2 45 12	2.7455	2 44 44	2.7374	2 44 15	2.7294	2 43 46	37
38	2.7505	2 45 02	2.7426	2 44 33	2.7346	2 44 04	2.7265	2 43 36	38
39	2.7476	2 44 51	2.7396	2 44 23	2.7316	2 43 54	2.7236	2 43 25	39
40	2.7446	2 44 41	2.7367	2 44 12	2.7287	2 43 44	2.7207	2 43 15	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$9^h\ 10^m\ 00^s$		$9^h\ 10^m\ 30^s$		$9^h\ 11^m\ 00^s$		$9^h\ 11^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	2. 8301	2 49 48	2. 8220	2 49 19	2. 8135	2 48 49	2. 8053	2 48 19	1
2	2. 8271	2 49 36	2. 8188	2 49 08	2. 8104	2 48 37	2. 8022	2 48 08	2
3	2. 8239	2 49 25	2. 8157	2 48 56	2. 8073	2 48 26	2. 7991	2 47 57	3
4	2. 8208	2 49 13	2. 8125	2 48 45	2. 8042	2 48 15	2. 7960	2 47 46	4
5	2. 8177	2 49 02	2. 8094	2 48 34	2. 8011	2 48 04	2. 7929	2 47 34	5
6	2. 8146	2 48 51	2. 8063	2 48 22	2. 7980	2 47 53	2. 7898	2 47 23	6
7	2. 8115	2 48 40	2. 8032	2 48 11	2. 7949	2 47 42	2. 7868	2 47 12	7
8	2. 8083	2 48 28	2. 8001	2 48 00	2. 7918	2 47 31	2. 7837	2 47 00	8
9	2. 8053	2 48 17	2. 7970	2 47 49	2. 7888	2 47 20	2. 7806	2 46 49	9
10	2. 8022	2 48 06	2. 7939	2 47 38	2. 7857	2 47 08	2. 7776	2 46 38	10
11	2. 7991	2 47 55	2. 7909	2 47 27	2. 7827	2 46 57	2. 7745	2 46 27	11
12	2. 7961	2 47 44	2. 7879	2 47 16	2. 7796	2 46 45	2. 7715	2 46 16	12
13	2. 7930	2 47 33	2. 7848	2 47 05	2. 7766	2 46 34	2. 7684	2 46 06	13
14	2. 7900	2 47 22	2. 7818	2 46 54	2. 7735	2 46 23	2. 7654	2 45 55	14
15	2. 7869	2 47 11	2. 7788	2 46 43	2. 7705	2 46 12	2. 7624	2 45 44	15
16	2. 7838	2 47 00	2. 7757	2 46 32	2. 7675	2 46 01	2. 7593	2 45 33	16
17	2. 7808	2 46 49	2. 7727	2 46 21	2. 7645	2 45 50	2. 7563	2 45 22	17
18	2. 7778	2 46 39	2. 7697	2 46 10	2. 7614	2 45 39	2. 7533	2 45 11	18
19	2. 7747	2 46 28	2. 7666	2 45 59	2. 7584	2 45 28	2. 7503	2 45 01	19
20	2. 7717	2 46 18	2. 7636	2 45 48	2. 7555	2 45 17	2. 7473	2 44 50	20
21	2. 7688	2 46 07	2. 7607	2 45 37	2. 7524	2 45 06	2. 7443	2 44 39	21
22	2. 7658	2 45 56	2. 7576	2 45 27	2. 7494	2 44 55	2. 7414	2 44 29	22
23	2. 7627	2 45 45	2. 7547	2 45 16	2. 7465	2 44 45	2. 7385	2 44 19	23
24	2. 7598	2 45 35	2. 7517	2 45 06	2. 7435	2 44 35	2. 7355	2 44 08	24
25	2. 7568	2 45 24	2. 7487	2 44 55	2. 7405	2 44 25	2. 7325	2 43 57	25
26	2. 7538	2 45 13	2. 7457	2 44 44	2. 7376	2 44 15	2. 7295	2 43 46	26
27	2. 7508	2 45 02	2. 7428	2 44 34	2. 7347	2 44 05	2. 7266	2 43 35	27
28	2. 7478	2 44 52	2. 7399	2 44 23	2. 7317	2 43 54	2. 7236	2 43 25	28
29	2. 7448	2 44 41	2. 7369	2 44 12	2. 7288	2 43 43	2. 7207	2 43 15	29
30	2. 7419	2 44 30	2. 7339	2 44 02	2. 7258	2 43 32	2. 7177	2 43 04	30
31	2. 7390	2 44 20	2. 7310	2 43 51	2. 7228	2 43 21	2. 7148	2 42 53	31
32	2. 7360	2 44 09	2. 7280	2 43 40	2. 7199	2 43 11	2. 7119	2 42 42	32
33	2. 7331	2 43 59	2. 7251	2 43 30	2. 7170	2 43 01	2. 7090	2 42 32	33
34	2. 7302	2 43 48	2. 7222	2 43 19	2. 7141	2 42 50	2. 7061	2 42 22	34
35	2. 7272	2 43 37	2. 7193	2 43 09	2. 7112	2 42 40	2. 7032	2 42 12	35
36	2. 7243	2 43 27	2. 7164	2 42 59	2. 7083	2 42 29	2. 7003	2 42 01	36
37	2. 7214	2 43 17	2. 7135	2 42 48	2. 7054	2 42 19	2. 6975	2 41 51	37
38	2. 7186	2 43 07	2. 7106	2 42 38	2. 7025	2 42 09	2. 6947	2 41 41	38
39	2. 7157	2 42 57	2. 7077	2 42 27	2. 6996	2 41 58	2. 6918	2 41 30	39
40	2. 7128	2 42 46	2. 7048	2 42 17	2. 6967	2 41 48	2. 6889	2 41 20	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$9^h\ 12^m\ 00^s$		$9^h\ 12^m\ 30^s$		$9^h\ 13^m\ 00^s$		$9^h\ 13^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	2. 7969	2 47 48	2. 7886	2 47 18	2. 7803	2 46 49	2. 7720	2 46 19	1
2	2. 7938	2 47 37	2. 7855	2 47 08	2. 7772	2 46 38	2. 7689	2 46 08	2
3	2. 7907	2 47 26	2. 7825	2 46 57	2. 7741	2 46 27	2. 7658	2 45 57	3
4	2. 7876	2 47 15	2. 7794	2 46 46	2. 7711	2 46 16	2. 7627	2 45 46	4
5	2. 7845	2 47 04	2. 7763	2 46 35	2. 7679	2 46 05	2. 7597	2 45 35	5
6	2. 7815	2 46 53	2. 7732	2 46 23	2. 7649	2 45 54	2. 7567	2 45 25	6
7	2. 7784	2 46 42	2. 7701	2 46 12	2. 7619	2 45 43	2. 7536	2 45 14	7
8	2. 7753	2 46 31	2. 7671	2 46 01	2. 7588	2 45 32	2. 7506	2 45 03	8
9	2. 7723	2 46 20	2. 7640	2 45 50	2. 7558	2 45 21	2. 7476	2 44 52	9
10	2. 7692	2 46 09	2. 7610	2 45 39	2. 7528	2 45 10	2. 7445	2 44 41	10
11	2. 7662	2 45 58	2. 7580	2 45 28	2. 7498	2 44 59	2. 7415	2 44 30	11
12	2. 7632	2 45 47	2. 7549	2 45 17	2. 7468	2 44 48	2. 7385	2 44 19	12
13	2. 7601	2 45 36	2. 7520	2 45 07	2. 7437	2 44 38	2. 7355	2 44 09	13
14	2. 7571	2 45 25	2. 7490	2 44 56	2. 7406	2 44 27	2. 7325	2 43 58	14
15	2. 7541	2 45 14	2. 7459	2 44 45	2. 7377	2 44 16	2. 7295	2 43 47	15
16	2. 7510	2 45 03	2. 7429	2 44 34	2. 7347	2 44 05	2. 7266	2 43 36	16
17	2. 7480	2 44 52	2. 7399	2 44 23	2. 7318	2 43 54	2. 7236	2 43 25	17
18	2. 7451	2 44 42	2. 7370	2 44 13	2. 7288	2 43 44	2. 7207	2 43 15	18
19	2. 7421	2 44 31	2. 7339	2 44 02	2. 7257	2 43 33	2. 7176	2 43 04	19
20	2. 7391	2 44 20	2. 7310	2 43 52	2. 7228	2 43 22	2. 7147	2 42 53	20
21	2. 7361	2 44 09	2. 7280	2 43 41	2. 7199	2 43 12	2. 7117	2 42 43	21
22	2. 7332	2 43 59	2. 7251	2 43 30	2. 7170	2 43 01	2. 7088	2 42 32	22
23	2. 7302	2 43 48	2. 7221	2 43 20	2. 7140	2 42 50	2. 7059	2 42 21	23
24	2. 7273	2 43 38	2. 7191	2 43 09	2. 7111	2 42 40	2. 7030	2 42 11	24
25	2. 7243	2 43 27	2. 7162	2 42 58	2. 7081	2 42 29	2. 7001	2 42 00	25
26	2. 7214	2 43 17	2. 7133	2 42 47	2. 7052	2 42 19	2. 6972	2 41 50	26
27	2. 7185	2 43 06	2. 7104	2 42 36	2. 7023	2 42 08	2. 6943	2 41 39	27
28	2. 7155	2 42 55	2. 7075	2 42 26	2. 6993	2 41 57	2. 6914	2 41 28	28
29	2. 7126	2 42 45	2. 7045	2 42 15	2. 6964	2 41 47	2. 6885	2 41 18	29
30	2. 7097	2 42 35	2. 7017	2 42 05	2. 6936	2 41 37	2. 6856	2 41 08	30
31	2. 7068	2 42 24	2. 6988	2 41 55	2. 6907	2 41 26	2. 6827	2 40 57	31
32	2. 7038	2 42 13	2. 6959	2 41 44	2. 6878	2 41 16	2. 6798	2 40 47	32
33	2. 7009	2 42 03	2. 6930	2 41 33	2. 6849	2 41 06	2. 6769	2 40 37	33
34	2. 6980	2 41 52	2. 6901	2 41 23	2. 6820	2 40 55	2. 6740	2 40 26	34
35	2. 6952	2 41 42	2. 6872	2 41 13	2. 6792	2 40 45	2. 6712	2 40 16	35
36	2. 6923	2 41 31	2. 6843	2 41 03	2. 6763	2 40 35	2. 6683	2 40 06	36
37	2. 6894	2 41 21	2. 6815	2 40 53	2. 6734	2 40 24	2. 6654	2 39 55	37
38	2. 6866	2 41 11	2. 6786	2 40 42	2. 6706	2 40 14	2. 6626	2 39 45	38
39	2. 6837	2 41 01	2. 6757	2 40 32	2. 6677	2 40 04	2. 6598	2 39 35	39
40	2. 6808	2 40 51	2. 6729	2 40 22	2. 6650	2 39 54	2. 6569	2 39 25	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$9^h\ 14^m\ 00^s$		$9^h\ 14^m\ 30^s$		$9^h\ 15^m\ 00^s$		$9^h\ 15^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
'	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	'
1	2. 7636	2 45 49	2. 7553	2 45 19	2. 7470	2 44 49	2. 7387	2 44 19	1
2	2. 7605	2 45 38	2. 7522	2 45 08	2. 7439	2 44 38	2. 7356	2 44 08	2
3	2. 7575	2 45 27	2. 7492	2 44 57	2. 7409	2 44 27	2. 7325	2 43 57	3
4	2. 7545	2 45 16	2. 7461	2 44 46	2. 7378	2 44 16	2. 7295	2 43 46	4
5	2. 7514	2 45 05	2. 7431	2 44 35	2. 7348	2 44 05	2. 7265	2 43 35	5
6	2. 7483	2 44 54	2. 7401	2 44 24	2. 7318	2 43 54	2. 7235	2 43 24	6
7	2. 7453	2 44 43	2. 7371	2 44 13	2. 7288	2 43 44	2. 7205	2 43 14	7
8	2. 7423	2 44 32	2. 7340	2 44 02	2. 7257	2 43 33	2. 7175	2 43 04	8
9	2. 7393	2 44 21	2. 7310	2 43 52	2. 7228	2 43 22	2. 7145	2 42 53	9
10	2. 7363	2 44 10	2. 7280	2 43 41	2. 7198	2 43 12	2. 7115	2 42 42	10
11	2. 7333	2 43 59	2. 7250	2 43 30	2. 7169	2 43 01	2. 7086	2 42 31	11
12	2. 7303	2 43 48	2. 7220	2 43 19	2. 7139	2 42 50	2. 7056	2 42 21	12
13	2. 7273	2 43 37	2. 7190	2 43 08	2. 7109	2 42 39	2. 7026	2 42 10	13
14	2. 7243	2 43 26	2. 7160	2 42 57	2. 7079	2 42 28	2. 6996	2 41 59	14
15	2. 7213	2 43 15	2. 7131	2 42 46	2. 7049	2 42 18	2. 6967	2 41 48	15
16	2. 7183	2 43 04	2. 7101	2 42 35	2. 7020	2 42 07	2. 6937	2 41 38	16
17	2. 7154	2 42 54	2. 7072	2 42 25	2. 6991	2 41 57	2. 6908	2 41 27	17
18	2. 7124	2 42 43	2. 7043	2 42 15	2. 6961	2 41 46	2. 6879	2 41 16	18
19	2. 7095	2 42 33	2. 7013	2 42 04	2. 6931	2 41 35	2. 6850	2 41 06	19
20	2. 7065	2 42 23	2. 6984	2 41 54	2. 6902	2 41 25	2. 6821	2 40 56	20
21	2. 7036	2 42 13	2. 6955	2 41 44	2. 6873	2 41 14	2. 6792	2 40 45	21
22	2. 7007	2 42 02	2. 6925	2 41 33	2. 6844	2 41 04	2. 6763	2 40 34	22
23	2. 6977	2 41 52	2. 6896	2 41 23	2. 6815	2 40 53	2. 6734	2 40 24	23
24	2. 6948	2 41 41	2. 6867	2 41 12	2. 6786	2 40 43	2. 6705	2 40 14	24
25	2. 6919	2 41 31	2. 6838	2 41 02	2. 6757	2 40 33	2. 6676	2 40 03	25
26	2. 6890	2 41 20	2. 6808	2 40 51	2. 6728	2 40 22	2. 6647	2 39 53	26
27	2. 6861	2 41 10	2. 6779	2 40 40	2. 6699	2 40 12	2. 6618	2 39 43	27
28	2. 6832	2 41 00	2. 6750	2 40 30	2. 6670	2 40 01	2. 6589	2 39 32	28
29	2. 6803	2 40 49	2. 6722	2 40 19	2. 6641	2 39 51	2. 6561	2 39 22	29
30	2. 6775	2 40 39	2. 6694	2 40 09	2. 6613	2 39 41	2. 6533	2 39 11	30
31	2. 6746	2 40 29	2. 6666	2 39 59	2. 6585	2 39 30	2. 6504	2 39 01	31
32	2. 6717	2 40 18	2. 6637	2 39 49	2. 6556	2 39 20	2. 6475	2 38 51	32
33	2. 6688	2 40 08	2. 6608	2 39 38	2. 6528	2 39 10	2. 6447	2 38 41	33
34	2. 6659	2 39 57	2. 6579	2 39 28	2. 6499	2 39 00	2. 6419	2 38 30	34
35	2. 6631	2 39 47	2. 6551	2 39 18	2. 6471	2 38 50	2. 6391	2 38 20	35
36	2. 6602	2 39 37	2. 6522	2 39 08	2. 6442	2 38 39	2. 6363	2 38 10	36
37	2. 6574	2 39 27	2. 6494	2 38 58	2. 6414	2 38 29	2. 6334	2 38 00	37
38	2. 6546	2 39 17	2. 6466	2 38 48	2. 6386	2 38 19	2. 6306	2 37 50	38
39	2. 6518	2 39 06	2. 6438	2 38 38	2. 6358	2 38 09	2. 6277	2 37 40	39
40	2. 6489	2 38 56	2. 6410	2 38 28	2. 6330	2 37 59	2. 6249	2 37 30	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$9^h\ 16^m\ 00^s$		$9^h\ 16^m\ 30^s$		$9^h\ 17^m\ 00^s$		$9^h\ 17^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	2. 7302	2 43 49	2. 7219	2 43 19	2. 7137	2 42 48	2. 7053	2 42 19	1
2	2. 7272	2 43 38	2. 7189	2 43 08	2. 7106	2 42 37	2. 7023	2 42 08	2
3	2. 7242	2 43 27	2. 7159	2 43 58	2. 7076	2 42 27	2. 6993	2 41 57	3
4	2. 7212	2 43 16	2. 7129	2 42 47	2. 7046	2 42 16	2. 6963	2 41 46	4
5	2. 7182	2 43 05	2. 7099	2 42 36	2. 7017	2 42 05	2. 6933	2 41 35	5
6	2. 7152	2 42 55	2. 7070	2 42 25	2. 6987	2 41 54	2. 6904	2 41 25	6
7	2. 7122	2 42 44	2. 7040	2 42 14	2. 6957	2 41 44	2. 6875	2 41 15	7
8	2. 7092	2 42 34	2. 7010	2 42 04	2. 6928	2 41 34	2. 6845	2 41 04	8
9	2. 7062	2 42 23	2. 6980	2 41 53	2. 6898	2 41 23	2. 6816	2 40 54	9
10	2. 7032	2 42 13	2. 6951	2 41 42	2. 6868	2 41 12	2. 6786	2 40 43	10
11	2. 7003	2 42 02	2. 6921	2 41 32	2. 6838	2 41 01	2. 6757	2 40 32	11
12	2. 6974	2 41 51	2. 6891	2 41 21	2. 6809	2 40 50	2. 6728	2 40 21	12
13	2. 6944	2 41 40	2. 6862	2 41 10	2. 6779	2 40 40	2. 6698	2 40 11	13
14	2. 6915	2 41 29	2. 6833	2 41 00	2. 6750	2 40 30	2. 6669	2 39 01	14
15	2. 6885	2 41 19	2. 6803	2 40 49	2. 6721	2 40 19	2. 6640	2 39 50	15
16	2. 6856	2 41 08	2. 6774	2 40 39	2. 6692	2 40 09	2. 6611	2 39 40	16
17	2. 6827	2 40 58	2. 6745	2 40 28	2. 6663	2 39 59	2. 6582	2 39 30	17
18	2. 6797	2 40 47	2. 6716	2 40 18	2. 6635	2 39 48	2. 6553	2 39 19	18
19	2. 6768	2 40 36	2. 6687	2 40 07	2. 6605	2 39 37	2. 6523	2 39 08	19
20	2. 6739	2 40 26	2. 6658	2 39 57	2. 6576	2 39 27	2. 6495	2 38 57	20
21	2. 6710	2 40 16	2. 6629	2 39 46	2. 6548	2 39 17	2. 6466	2 38 47	21
22	2. 6681	2 40 05	2. 6600	2 39 36	2. 6519	2 39 07	2. 6438	2 38 37	22
23	2. 6652	2 39 55	2. 6571	2 39 26	2. 6490	2 38 56	2. 6409	2 38 27	23
24	2. 6623	2 39 44	2. 6542	2 39 15	2. 6461	2 38 46	2. 6380	2 38 17	24
25	2. 6595	2 39 34	2. 6514	2 39 05	2. 6432	2 38 36	2. 6352	2 38 07	25
26	2. 6566	2 39 24	2. 6485	2 38 55	2. 6405	2 38 26	2. 6323	2 37 56	26
27	2. 6537	2 39 13	2. 6456	2 38 44	2. 6376	2 38 15	2. 6295	2 37 46	27
28	2. 6509	2 39 03	2. 6428	2 38 34	2. 6347	2 38 05	2. 6266	2 37 36	28
29	2. 6480	2 38 53	2. 6399	2 38 24	2. 6319	2 37 54	2. 6238	2 37 26	29
30	2. 6452	2 38 43	2. 6371	2 38 14	2. 6290	2 37 44	2. 6210	2 37 16	30
31	2. 6423	2 38 32	2. 6343	2 38 03	2. 6262	2 37 34	2. 6182	2 37 06	31
32	2. 6395	2 38 22	2. 6314	2 37 53	2. 6234	2 37 24	2. 6154	2 36 55	32
33	2. 6367	2 38 12	2. 6286	2 37 43	2. 6206	2 37 14	2. 6126	2 36 45	33
34	2. 6338	2 38 02	2. 6257	2 37 33	2. 6178	2 37 04	2. 6097	2 36 35	34
35	2. 6310	2 37 52	2. 6229	2 37 22	2. 6150	2 36 54	2. 6070	2 36 25	35
36	2. 6282	2 37 42	2. 6202	2 37 13	2. 6121	2 36 44	2. 6042	2 36 15	36
37	2. 6254	2 37 31	2. 6174	2 37 03	2. 6094	2 36 34	2. 6014	2 36 05	37
38	2. 6226	2 37 21	2. 6146	2 36 53	2. 6066	2 36 24	2. 5987	2 35 55	38
39	2. 6198	2 37 11	2. 6118	2 36 42	2. 6038	2 36 14	2. 5959	2 35 45	39
40	2. 6170	2 37 01	2. 5931	2 36 32	2. 6011	2 36 04	2. 5931	2 35 35	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$9^h\ 18^m\ 00^s$		$9^h\ 18^m\ 30^s$		$9^h\ 19^m\ 00^s$		$9^h\ 19^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	2. 6971	2 41 49	2. 6887	2 41 20	2. 6804	2 40 49	2. 6721	2 40 19	1
2	2. 6940	2 41 38	2. 6857	2 41 10	2. 6774	2 40 38	2. 6690	2 40 08	2
3	2. 6910	2 41 28	2. 6828	2 40 59	2. 6745	2 40 28	2. 6661	2 39 58	3
4	2. 6881	2 41 17	2. 6798	2 40 48	2. 6715	2 40 17	2. 6632	2 39 47	4
5	2. 6850	2 41 06	2. 6768	2 40 37	2. 6685	2 40 06	2. 6602	2 39 36	5
6	2. 6820	2 40 55	2. 6738	2 40 26	2. 6655	2 39 55	2. 6573	2 39 26	6
7	2. 6791	2 40 45	2. 6708	2 40 16	2. 6626	2 39 45	2. 6544	2 39 15	7
8	2. 6762	2 40 34	2. 6679	2 40 05	2. 6597	2 39 34	2. 6514	2 39 05	8
9	2. 6733	2 40 24	2. 6650	2 39 54	2. 6568	2 39 24	2. 6485	2 38 54	9
10	2. 6703	2 40 13	2. 6621	2 39 44	2. 6538	2 39 13	2. 6456	2 38 44	10
11	2. 6674	2 40 02	2. 6592	2 39 32	2. 6509	2 39 03	2. 6427	2 38 33	11
12	2. 6645	2 39 52	2. 6563	2 39 22	2. 6481	2 38 53	2. 6398	2 38 23	12
13	2. 6615	2 39 41	2. 6534	2 39 11	2. 6452	2 38 42	2. 6369	2 38 13	13
14	2. 6586	2 39 31	2. 6504	2 39 01	2. 6423	2 38 32	2. 6340	2 38 02	14
15	2. 6558	2 39 21	2. 6475	2 38 51	2. 6394	2 38 21	2. 6312	2 37 52	15
16	2. 6528	2 39 10	2. 6446	2 38 41	2. 6365	2 38 11	2. 6283	2 37 41	16
17	2. 6500	2 39 00	2. 6417	2 38 31	2. 6336	2 38 00	2. 6254	2 37 31	17
18	2. 6471	2 38 50	2. 6389	2 38 20	2. 6307	2 37 50	2. 6225	2 37 21	18
19	2. 6442	2 38 39	2. 6360	2 38 10	2. 6279	2 37 40	2. 6197	2 37 11	19
20	2. 6413	2 38 29	2. 6332	2 38 00	2. 6250	2 37 30	2. 6169	2 37 00	20
21	2. 6384	2 38 18	2. 6303	2 37 49	2. 6221	2 37 19	2. 6140	2 36 50	21
22	2. 6355	2 38 08	2. 6274	2 37 39	2. 6193	2 37 09	2. 6112	2 36 40	22
23	2. 6327	2 37 58	2. 6246	2 37 29	2. 6164	2 36 58	2. 6085	2 36 30	23
24	2. 6299	2 37 48	2. 6218	2 37 18	2. 6136	2 36 48	2. 6056	2 36 20	24
25	2. 6271	2 37 37	2. 6189	2 37 08	2. 6108	2 36 38	2. 6027	2 36 09	25
26	2. 6242	2 37 27	2. 6161	2 36 58	2. 6081	2 36 28	2. 5998	2 35 59	26
27	2. 6214	2 37 17	2. 6132	2 36 48	2. 6053	2 36 18	2. 5971	2 35 49	27
28	2. 6186	2 37 07	2. 6105	2 36 37	2. 6025	2 36 08	2. 5943	2 35 39	28
29	2. 6157	2 36 57	2. 6076	2 26 27	2. 5996	2 35 58	2. 5915	2 35 29	29
30	2. 6129	2 36 46	2. 6048	2 36 17	2. 5969	2 35 48	2. 5887	2 35 19	30
31	2. 6102	2 36 36	2. 6019	2 36 07	2. 5940	2 35 38	2. 5859	2 35 09	31
32	2. 6073	2 36 26	3. 5992	2 35 57	2. 5912	2 35 28	2. 5831	2 34 59	32
33	2. 6044	2 36 16	2. 5964	2 35 47	2. 5884	2 35 18	2. 5804	2 34 49	33
34	2. 6016	2 36 06	2. 5936	2 35 37	2. 5857	2 35 08	2. 5776	2 34 39	34
35	2. 5990	2 35 56	2. 5909	2 35 27	2. 5830	2 34 58	2. 5749	2 34 29	35
36	2. 5961	2 35 46	2. 5881	2 35 17	2. 5802	2 34 48	2. 5721	2 34 19	36
37	2. 5934	2 35 36	2. 5854	2 35 07	2. 5774	2 34 38	2. 5694	2 34 10	37
38	2. 5907	2 35 26	2. 5826	2 34 57	2. 5747	2 34 28	2. 5667	2 34 00	38
39	2. 5878	2 35 16	2. 5799	2 34 48	2. 5719	2 34 18	2. 5639	2 33 50	39
40	2. 5851	2 35 06	2. 5771	2 34 38	2. 5691	2 34 09	2. 5612	2 33 40	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$9^h\ 20^m\ 00^s$		$9^h\ 20^m\ 30^s$		$9^h\ 21^m\ 00^s$		$9^h\ 21^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	2. 6637	2 39 49	2. 6553	2 39 19	2. 6470	2 38 49	2. 6387	2 38 19	1
2	2. 6608	2 39 38	2. 6523	2 39 08	2. 6441	2 38 39	2. 6358	2 38 09	2
3	2. 6578	2 39 27	2. 6494	2 38 57	2. 6412	2 38 28	2. 6329	2 37 58	3
4	2. 6550	2 39 16	2. 6465	2 38 47	2. 6383	2 38 18	2. 6300	2 37 48	4
5	2. 6519	2 39 06	2. 6436	2 38 37	2. 6353	2 38 07	2. 6271	2 37 38	5
6	2. 6490	2 38 56	2. 6407	2 38 26	2. 6324	2 37 57	2. 6242	2 37 27	6
7	2. 6460	2 38 45	2. 6378	2 38 16	2. 6295	2 37 46	2. 6213	2 37 17	7
8	2. 6431	2 38 34	2. 6349	3 38 05	2. 6266	2 37 36	2. 6184	2 37 06	8
9	2. 6402	2 38 24	2. 6320	2 37 55	2. 6238	2 37 26	2. 6155	2 36 56	9
10	2. 6373	2 38 14	2. 6291	2 37 44	2. 6209	2 37 15	2. 6126	2 36 45	10
11	2. 6345	2 38 04	2. 6263	2 37 34	2. 6180	2 37 05	2. 6097	2 36 35	11
12	2. 6316	2 37 53	2. 6234	2 37 24	2. 6151	2 36 54	2. 6069	2 36 24	12
13	2. 6287	2 37 42	2. 6205	2 37 13	2. 6123	2 36 44	2. 6039	2 36 14	13
14	2. 6258	2 37 32	2. 6176	2 37 03	2. 6094	2 36 34	2. 6010	2 36 04	14
15	2. 6230	2 37 22	2. 6147	2 36 52	2. 6065	2 36 23	2. 5973	2 35 54	15
16	2. 6202	2 37 11	2. 6119	2 36 42	2. 6036	2 36 13	2. 5955	2 35 44	16
17	2. 6173	2 37 01	2. 6091	2 36 32	2. 6008	2 36 03	2. 5926	2 35 33	17
18	2. 6145	2 36 51	2. 6062	2 36 22	2. 5980	2 35 53	2. 5898	2 35 23	18
19	2. 6116	2 36 40	2. 6033	2 36 11	2. 5952	2 35 43	2. 5870	2 35 13	19
20	2. 6087	2 36 30	2. 6005	2 36 01	2. 5924	2 35 33	2. 5842	2 35 03	20
21	2. 6058	2 36 20	2. 5977	2 35 51	2. 5896	2 35 22	2. 5814	2 34 53	21
22	2. 6030	2 36 10	2. 5949	2 35 41	2. 5868	2 35 12	2. 5786	2 34 43	22
23	2. 6002	2 36 00	2. 5921	2 35 31	2. 5840	2 35 02	2. 5758	2 34 33	23
24	2. 5974	2 35 50	2. 5893	2 35 21	2. 5812	2 34 52	2. 5730	2 34 23	24
25	2. 5946	2 35 40	2. 5865	2 35 11	2. 5784	2 34 42	2. 5703	2 34 13	25
26	2. 5918	2 35 30	2. 5837	2 35 01	2. 5756	2 34 32	2. 5675	2 34 03	26
27	2. 5890	2 35 20	2. 5808	2 34 50	2. 5728	2 34 22	2. 5647	2 33 53	27
28	2. 5862	2 35 10	2. 5781	2 34 40	2. 5700	2 34 12	2. 5620	2 33 43	28
29	2. 5834	2 35 00	2. 5753	2 34 31	2. 5673	2 34 02	2. 5592	2 33 33	29
30	2. 5806	2 34 50	2. 5726	2 34 21	2. 5645	2 33 52	2. 5564	2 33 23	30
31	2. 5779	2 34 40	2. 5698	2 34 11	2. 5618	2 33 42	2. 5537	2 33 14	31
32	2. 5751	2 34 30	2. 5671	2 34 01	2. 5590	2 33 32	2. 5510	2 33 04	32
33	2. 5723	2 34 20	2. 5643	2 33 51	2. 5563	2 33 23	2. 5482	2 32 54	33
34	2. 5696	2 34 10	2. 5616	2 33 41	2. 5535	2 33 13	2. 5455	2 32 44	34
35	2. 5669	2 34 00	2. 5588	2 33 31	2. 5508	2 33 03	2. 5428	2 32 34	35
36	2. 5641	2 33 50	2. 5561	2 33 21	2. 5480	2 32 53	2. 5401	2 32 24	36
37	2. 5613	2 33 40	2. 5534	2 33 12	2. 5453	2 32 43	2. 5374	2 32 15	37
38	2. 5586	2 33 31	2. 5507	2 33 02	2. 5426	2 32 33	2. 5346	2 32 05	38
39	2. 5558	2 33 21	2. 5479	2 32 52	2. 5399	2 32 24	2. 5319	2 31 55	39
40	2. 5532	2 33 12	2. 5452	2 32 42	2. 5372	2 32 14	2. 5293	2 31 45	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$9^h\ 22^m\ 00^s$		$9^h\ 22^m\ 30^s$		$9^h\ 23^m\ 00^s$		$9^h\ 23^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	2. 6305	2 37 50	2. 6221	2 37 20	2. 6137	2 36 49	2. 6053	2 36 19	1
2	2. 6275	2 37 39	2. 6192	2 37 09	2. 6107	2 36 39	2. 6024	2 36 09	2
3	2. 6246	2 37 29	2. 6163	2 36 59	2. 6078	2 36 29	2. 5995	2 35 58	3
4	2. 6217	2 37 18	2. 6134	2 36 48	2. 6049	2 36 19	2. 5966	2 35 48	4
5	2. 6188	2 37 07	2. 6105	2 36 38	2. 6021	2 36 08	2. 5937	2 35 37	5
6	2. 6159	2 36 57	2. 6076	2 36 27	2. 5992	2 35 57	2. 5909	2 35 27	6
7	2. 6130	2 36 47	2. 6047	2 36 17	2. 5963	2 35 47	2. 5881	2 35 17	7
8	2. 6102	2 36 37	2. 6018	2 36 07	2. 5935	2 35 37	2. 5853	2 35 07	8
9	2. 6074	2 36 27	2. 5991	2 35 57	2. 5907	2 35 27	2. 5825	2 34 57	9
10	2. 6044	2 36 16	2. 5962	2 35 46	2. 5879	2 35 16	2. 5797	2 34 47	10
11	2. 6015	2 36 06	2. 5933	2 35 36	2. 5851	2 35 06	2. 5768	2 34 36	11
12	2. 5987	2 35 56	2. 5905	2 35 26	2. 5822	2 34 56	2. 5739	2 34 26	12
13	2. 5959	2 35 45	2. 5876	2 35 16	2. 5793	2 34 46	2. 5712	2 34 16	13
14	2. 5930	2 35 35	2. 5848	2 35 05	2. 5764	2 34 35	2. 5683	2 34 06	14
15	2. 5902	2 35 25	2. 5820	2 34 55	2. 5736	2 34 25	2. 5656	2 33 56	15
16	2. 5873	2 35 14	2. 5792	2 34 45	2. 5708	2 34 15	2. 5627	2 33 46	16
17	2. 5845	2 35 04	2. 5763	2 34 35	2. 5681	2 34 05	2. 5599	2 33 36	17
18	2. 5818	2 34 54	2. 5735	2 34 25	2. 5654	2 33 55	2. 5571	2 33 26	18
19	2. 5789	2 34 44	2. 5707	2 34 15	2. 5626	2 33 45	2. 5544	2 33 16	19
20	2. 5761	2 34 34	2. 5679	2 34 04	2. 5598	2 33 35	2. 5516	2 33 06	20
21	2. 5733	2 34 24	2. 5652	2 33 55	2. 5570	2 33 25	2. 5489	2 32 56	21
22	2. 5705	2 34 14	2. 5625	2 33 45	2. 5542	2 33 15	2. 5461	2 32 46	22
23	2. 5678	2 34 04	2. 5597	2 33 35	2. 5513	2 33 05	2. 5434	2 32 36	23
24	2. 5650	2 33 54	2. 5569	2 33 25	2. 5486	2 32 55	2. 5405	2 32 26	24
25	2. 5622	2 33 44	2. 5542	2 33 15	2. 5458	2 32 45	2. 5377	2 32 16	25
26	2. 5594	2 33 34	2. 5513	2 33 05	2. 5431	2 32 35	2. 5351	2 32 06	26
27	2. 5567	2 33 24	2. 5486	2 32 55	2. 5404	2 32 25	2. 5323	2 31 56	27
28	2. 5539	2 33 14	2. 5458	2 32 45	2. 5377	2 32 16	2. 5296	2 31 47	28
29	2. 5512	2 33 04	2. 5431	2 32 35	2. 5350	2 32 06	2. 5269	2 31 37	29
30	2. 5484	2 32 54	2. 5403	2 32 25	2. 5323	2 31 56	2. 5242	2 31 27	30
31	2. 5456	2 32 44	2. 5376	2 32 15	2. 5295	2 31 46	2. 5214	2 31 17	31
32	2. 5428	2 32 34	2. 5348	2 32 05	2. 5268	2 31 36	2. 5187	2 31 07	32
33	2. 5401	2 32 25	2. 5321	2 31 56	2. 5242	2 31 27	2. 5161	2 30 58	33
34	2. 5374	2 32 15	2. 5294	2 31 46	2. 5213	2 31 17	2. 5133	2 30 48	34
35	2. 5347	2 32 05	2. 5267	2 31 36	2. 5187	2 31 08	2. 5106	2 30 38	35
36	2. 5320	2 31 55	2. 5240	2 31 26	2. 5160	2 30 58	2. 5080	2 30 29	36
37	2. 5293	2 31 45	2. 5213	2 31 17	2. 5133	2 30 48	2. 5053	2 30 19	37
38	2. 5267	2 31 36	2. 5187	2 31 07	2. 5106	2 30 39	2. 5026	2 30 09	38
39	2. 5240	2 31 26	2. 5160	2 30 58	2. 5080	2 30 29	2. 4999	2 29 59	39
40	2. 5212	2 31 16	2. 5133	2 30 48	2. 5053	2 30 19	2. 4973	2 29 50	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	9h 24m 00s		9h 24m 30s		9h 25m 00s		9h 25m 30s		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	2. 5972	2 35 49	2. 5888	2 35 20	2. 5805	2 34 50	2. 5721	2 34 19	1
2	2. 5943	2 35 39	2. 5859	2 35 09	2. 5776	2 34 40	2. 5693	2 34 09	2
3	2. 5913	2 35 28	2. 5830	2 34 59	2. 5747	2 34 29	2. 5664	2 33 59	3
4	2. 5885	2 35 18	2. 5802	2 34 49	2. 5718	2 34 18	2. 5636	2 33 48	4
5	2. 5856	2 35 08	2. 5773	2 34 38	2. 5690	2 34 08	2. 5608	2 33 38	5
6	2. 5828	2 34 57	2. 5745	2 34 28	2. 5662	2 33 58	2. 5579	2 33 28	6
7	2. 5799	2 34 47	2. 5716	2 34 18	2. 5634	2 33 48	2. 5551	2 33 18	7
8	2. 5770	2 34 37	2. 5688	2 34 08	2. 5606	2 33 37	2. 5524	2 33 09	8
9	2. 5743	2 34 27	2. 5661	2 33 57	2. 5577	2 33 27	2. 5496	2 32 59	9
10	2. 5714	2 34 17	2. 5632	2 33 47	2. 5549	2 33 17	2. 5467	2 32 48	10
11	2. 5686	2 34 07	2. 5604	2 33 37	2. 5521	2 33 07	2. 5439	2 32 38	11
12	2. 5659	2 33 57	2. 5575	2 33 27	2. 5493	2 32 57	2. 5412	2 32 28	12
13	2. 5631	2 33 47	2. 5548	2 33 17	2. 5465	2 32 47	2. 5384	2 32 18	13
14	2. 5603	2 33 36	2. 5519	2 33 07	2. 5437	2 32 37	2. 5356	2 32 08	14
15	2. 5575	2 33 26	2. 5492	2 32 57	2. 5409	2 32 27	2. 5328	2 31 58	15
16	2. 5547	2 33 16	2. 5464	2 32 47	2. 5381	2 32 17	2. 5300	2 31 48	16
17	2. 5519	2 33 06	2. 5436	2 32 37	2. 5354	2 32 07	2. 5273	2 31 38	17
18	2. 5491	2 32 56	2. 5408	2 32 27	2. 5327	2 31 57	2. 5246	2 31 29	18
19	2. 5463	2 32 46	2. 5380	2 32 17	2. 5299	2 31 47	2. 5218	2 31 18	19
20	2. 5435	2 32 36	2. 5353	2 32 07	2. 5272	2 31 37	2. 5190	2 31 08	20
21	2. 5407	2 32 27	2. 5325	2 31 57	2. 5244	2 31 27	2. 5164	2 30 59	21
22	2. 5380	2 32 17	2. 5298	2 31 47	2. 5217	2 31 18	2. 5136	2 30 49	22
23	2. 5352	2 32 07	2. 5270	2 31 37	2. 5189	2 31 08	2. 5109	2 30 39	23
24	2. 5325	2 31 57	2. 5243	2 31 28	2. 5163	2 30 58	2. 5082	2 30 30	24
25	2. 5298	2 31 47	2. 5216	2 31 18	2. 5135	2 30 48	2. 5054	2 30 19	25
26	2. 5271	2 31 37	2. 5189	2 31 08	2. 5108	2 30 38	2. 5027	2 30 10	26
27	2. 5243	2 31 28	2. 5162	2 30 59	2. 5081	2 30 29	2. 5000	2 30 00	27
28	2. 5216	2 31 18	2. 5134	2 30 49	2. 5054	2 30 19	2. 4973	2 29 49	28
29	2. 5188	2 31 08	2. 5107	2 30 39	2. 5027	2 30 10	2. 4946	2 29 39	29
30	2. 5161	2 30 59	2. 5081	2 30 29	2. 5000	2 30 00	2. 4919	2 29 30	30
31	2. 5134	2 30 49	2. 5054	2 30 19	2. 4973	2 29 49	2. 4892	2 29 21	31
32	2. 5107	2 30 39	2. 5027	2 30 09	2. 4946	2 29 39	2. 4865	2 29 11	32
33	2. 5080	2 30 29	2. 5000	2 30 00	2. 4919	2 29 30	2. 4838	2 29 01	33
34	2. 5054	2 30 19	2. 4973	2 29 51	2. 4892	2 29 21	2. 4811	2 28 51	34
35	2. 5026	2 30 09	2. 4946	2 29 41	2. 4866	2 29 11	2. 4784	2 28 42	35
36	2. 5000	2 30 00	2. 4919	2 29 31	2. 4840	2 29 02	2. 4758	2 28 32	36
37	2. 4973	2 29 50	2. 4893	2 29 21	2. 4813	2 28 53	2. 4732	2 28 23	37
38	2. 4947	2 29 41	2. 4867	2 29 12	2. 4786	2 28 43	2. 4706	2 28 14	38
39	2. 4920	2 29 31	2. 4841	2 29 03	2. 4760	2 28 34	2. 4680	2 28 04	39
40	2. 4894	2 29 22	2. 4814	2 28 53	2. 4734	2 28 24	2. 4654	2 27 55	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$9^h\ 26^m\ 00^s$		$9^h\ 26^m\ 30^s$		$9^h\ 27^m\ 00^s$		$9^h\ 27^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	2. 5639	2 35 50	2. 5555	2 33 19	2. 5472	2 32 50	2. 5389	2 32 20	1
2	2. 5610	2 33 39	2. 5527	2 33 09	2. 5444	2 32 40	2. 5360	2 32 10	2
3	2. 5581	2 33 29	2. 5498	2 32 59	2. 5416	2 32 30	2. 5332	2 32 00	3
4	2. 5553	2 33 19	2. 5470	2 32 49	2. 5388	2 32 20	2. 5305	2 31 50	4
5	2. 5525	2 33 09	2. 5442	2 32 39	2. 5359	2 32 09	2. 5276	2 31 39	5
6	2. 5496	2 32 58	2. 5414	2 32 29	2. 5330	2 31 59	2. 5248	2 31 29	6
7	2. 5468	2 32 48	2. 5385	2 32 18	2. 5302	2 31 49	2. 5221	2 31 20	7
8	2. 5440	2 32 38	2. 5358	2 32 08	2. 5274	2 31 39	2. 5192	2 31 09	8
9	2. 5413	2 32 28	2. 5330	2 31 58	2. 5247	2 31 29	2. 5165	2 30 59	9
10	2. 5385	2 32 18	2. 5302	2 31 48	2. 5220	2 31 19	2. 5137	2 30 49	10
11	2. 5357	2 32 08	2. 5274	2 31 38	2. 5192	2 31 09	2. 5110	2 30 40	11
12	2. 5329	2 31 58	2. 5247	2 31 28	2. 5164	2 30 59	2. 5082	2 30 30	12
13	2. 5301	2 31 48	2. 5219	2 31 18	2. 5136	2 30 49	2. 5055	2 30 20	13
14	2. 5273	2 31 38	2. 5191	2 31 08	2. 5109	2 30 39	2. 5027	2 30 10	14
15	2. 5246	2 31 28	2. 5164	2 30 59	2. 5082	2 30 30	2. 5000	2 30 00	15
16	2. 5218	2 31 18	2. 5136	2 30 49	2. 5054	2 30 19	2. 4973	2 29 50	16
17	2. 5190	2 31 08	2. 5109	2 30 39	2. 5027	2 30 10	2. 4945	2 29 40	17
18	2. 5164	2 30 59	2. 5082	2 30 29	2. 5000	2 30 00	2. 4918	2 29 30	18
19	2. 5136	2 30 49	2. 5054	2 30 19	2. 4973	2 29 50	2. 4892	2 29 21	19
20	2. 5109	2 30 39	2. 5027	2 30 09	2. 4946	2 29 41	2. 4864	2 29 11	20
21	2. 5082	2 30 29	2. 5000	2 30 00	2. 4919	2 29 31	2. 4836	2 29 01	21
22	2. 5054	2 30 19	2. 4973	2 29 50	2. 4892	2 29 21	2. 4810	2 28 51	22
23	2. 5027	2 30 09	2. 4946	2 29 40	2. 4865	2 29 11	2. 4784	2 28 42	23
24	2. 5000	2 30 00	2. 4918	2 29 31	2. 4838	2 29 02	2. 4757	2 28 33	24
25	2. 4973	2 29 50	2. 4892	2 29 21	2. 4811	2 28 52	2. 4730	2 28 23	25
26	2. 4946	2 29 40	2. 4865	2 29 11	2. 4784	2 28 42	2. 4703	2 28 13	26
27	2. 4918	2 29 30	2. 4838	2 29 01	2. 4757	2 28 33	2. 4676	2 28 03	27
28	2. 4892	2 29 21	2. 4811	2 28 52	2. 4730	2 28 23	2. 4650	2 27 54	28
29	2. 4865	2 29 11	2. 4785	2 28 42	2. 4703	2 28 13	2. 4623	2 27 44	29
30	2. 4839	2 29 02	2. 4758	2 28 32	2. 4677	2 28 04	2. 4597	2 27 35	30
31	2. 4811	2 28 52	2. 4732	2 28 23	2. 4651	2 27 54	2. 4571	2 27 26	31
32	2. 4785	2 28 42	2. 4705	2 28 13	2. 4625	2 27 45	2. 4544	2 27 16	32
33	2. 4759	2 28 33	2. 4679	2 28 04	2. 4598	2 27 35	2. 4518	2 27 06	33
34	2. 4732	2 28 24	2. 4651	2 27 54	2. 4572	2 27 26	2. 4492	2 26 57	34
35	2. 4706	2 28 14	2. 4625	2 27 45	2. 4545	2 27 16	2. 4465	2 26 47	35
36	2. 4679	2 28 04	2. 4599	2 27 35	2. 4519	2 27 07	2. 4438	2 26 38	36
37	2. 4653	2 27 55	2. 4573	2 27 26	2. 4493	2 26 57	2. 4413	2 26 29	37
38	2. 4626	2 27 45	2. 4547	2 27 17	2. 4467	2 26 48	2. 4387	2 26 19	38
39	2. 4600	2 27 36	2. 4520	2 27 07	2. 4441	2 26 39	2. 4361	2 26 10	39
40	2. 4574	2 27 26	2. 4495	2 26 58	2. 4415	2 26 29	2. 4335	2 26 01	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	9h 28m 00s		9h 28m 30s		9h 29m 00s		9h 29m 30s		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	2. 5305	2 31 50	2. 5223	2 31 20	2. 5139	2 30 50	2. 5056	2 30 20	1
2	2. 5276	2 31 39	2. 5193	2 31 09	2. 5111	2 30 40	2. 5028	2 30 10	2
3	2. 5248	2 31 29	2. 5166	2 31 00	2. 5083	2 30 30	2. 5000	2 30 00	3
4	2. 5221	2 31 20	2. 5138	2 30 50	2. 5056	2 30 20	2. 4972	2 29 50	4
5	2. 5193	2 31 09	2. 5110	2 30 40	2. 5028	2 30 10	2. 4945	2 29 40	5
6	2. 5165	2 31 59	2. 5083	2 30 30	2. 5000	2 30 00	2. 4918	2 29 30	6
7	2. 5137	2 30 49	2. 5055	2 30 20	2. 4972	2 29 50	2. 4891	2 29 20	7
8	2. 5109	2 30 39	2. 5027	2 30 10	2. 4945	2 29 40	2. 4864	2 29 10	8
9	2. 5082	2 30 29	2. 5000	2 30 00	2. 4918	2 29 30	2. 4836	2 29 00	9
10	2. 5055	2 30 20	2. 4973	2 29 50	2. 4890	2 29 20	2. 4808	2 28 51	10
11	2. 5027	2 30 09	2. 4944	2 29 40	2. 4863	2 29 10	2. 4780	2 28 41	11
12	2. 5000	2 30 00	2. 4917	2 29 31	2. 4836	2 29 00	2. 4753	2 28 31	12
13	2. 4973	2 29 50	2. 4891	2 29 21	2. 4809	2 28 51	2. 4725	2 28 21	13
14	2. 4945	2 29 40	2. 4863	2 29 11	2. 4782	2 28 42	2. 4698	2 28 11	14
15	2. 4917	2 29 30	2. 4835	2 29 01	2. 4754	2 28 32	2. 4672	2 28 02	15
16	2. 4890	2 29 20	2. 4808	2 28 51	2. 4727	2 28 22	2. 4645	2 27 52	16
17	2. 4863	2 29 11	2. 4782	2 28 42	2. 4700	2 28 12	2. 4617	2 27 42	17
18	2. 4836	2 29 01	2. 4755	2 28 32	2. 4673	2 28 02	2. 4591	2 27 33	18
19	2. 4809	2 28 51	2. 4728	2 28 22	2. 4646	2 27 53	2. 4564	2 27 23	19
20	2. 4783	2 28 42	2. 4701	2 28 12	2. 4620	2 27 43	2. 4538	2 27 14	20
21	2. 4757	2 28 33	2. 4674	2 28 03	2. 4593	2 27 33	2. 4512	2 27 04	21
22	2. 4728	2 28 22	2. 4647	2 27 53	2. 4566	2 27 24	2. 4486	2 26 55	22
23	2. 4701	2 28 12	2. 4621	2 27 43	2. 4539	2 27 14	2. 4459	2 26 45	23
24	2. 4675	2 28 03	2. 4593	2 27 34	2. 4513	2 27 05	2. 4432	2 26 36	24
25	2. 4649	2 27 54	2. 4568	2 27 24	2. 4486	2 26 55	2. 4405	2 26 26	25
26	2. 4622	2 27 44	2. 4541	2 27 15	2. 4460	2 26 46	2. 4379	2 26 16	26
27	2. 4595	2 27 34	2. 4514	2 27 05	2. 4433	2 26 36	2. 4352	2 26 06	27
28	2. 4568	2 27 24	2. 4487	2 26 55	2. 4407	2 26 27	2. 4326	2 25 57	28
29	2. 4542	2 27 15	2. 4461	2 26 46	2. 4381	2 26 17	2. 4300	2 25 48	29
30	2. 4516	2 27 06	2. 4435	2 26 37	2. 4355	2 26 08	2. 4274	2 25 39	30
31	2. 4489	2 26 56	2. 4409	2 26 27	2. 4329	2 25 58	2. 4248	2 25 29	31
32	2. 4462	2 26 46	2. 4382	2 26 18	2. 4303	2 25 49	2. 4222	2 25 20	32
33	2. 4437	2 26 37	2. 4356	2 26 08	2. 4277	2 25 40	2. 4196	2 25 11	33
34	2. 4411	2 26 28	2. 4330	2 25 59	2. 4251	2 25 30	2. 4170	2 25 02	34
35	2. 4384	2 26 18	2. 4303	2 25 49	2. 4225	2 25 21	2. 4144	2 24 52	35
36	2. 4358	2 26 09	2. 4278	2 25 40	2. 4199	2 25 12	2. 4118	2 24 42	36
37	2. 4333	2 26 00	2. 4252	2 25 31	2. 4173	2 25 02	2. 4092	2 24 33	37
38	2. 4307	2 25 51	2. 4226	2 25 21	2. 4147	2 24 53	2. 4066	2 24 24	38
39	2. 4281	2 25 41	2. 4201	2 25 12	2. 4121	2 24 44	2. 4041	2 24 15	39
40	2. 4255	2 25 32	2. 4176	2 25 03	2. 4096	2 24 35	2. 4016	2 24 06	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$9^h\ 30^m\ 00^s$		$9^h\ 30^m\ 30^s$		$9^h\ 31^m\ 00^s$		$9^h\ 31^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	2. 4972	2 29 50	2. 4889	2 29 20	2. 4805	2 28 50	2. 4722	2 28 20	1
2	2. 4944	2 29 40	2. 4862	2 29 10	2. 4779	2 28 40	2. 4694	2 28 10	2
3	2. 4916	2 29 30	2. 4834	2 29 00	2. 4751	2 28 30	2. 4667	2 28 00	3
4	2. 4889	2 29 20	2. 4806	2 28 50	2. 4723	2 28 20	2. 4640	2 27 50	4
5	2. 4861	2 29 10	2. 4779	2 28 40	2. 4696	2 28 11	2. 4613	2 27 41	5
6	2. 4834	2 29 00	2. 4751	2 28 30	2. 4669	2 28 01	2. 4585	2 27 31	6
7	2. 4807	2 28 50	2. 4724	2 28 20	2. 4642	2 27 51	2. 4558	2 27 21	7
8	2. 4780	2 28 40	2. 4697	2 28 11	2. 4615	2 27 41	2. 4531	2 27 11	8
9	2. 4753	2 28 31	2. 4670	2 28 01	2. 4588	2 27 32	2. 4505	2 27 02	9
10	2. 4725	2 28 21	2. 4643	2 27 51	2. 4560	2 27 22	2. 4478	2 26 52	10
11	2. 4698	2 28 11	2. 4616	2 27 42	2. 4533	2 27 12	2. 4451	2 26 43	11
12	2. 4671	2 28 01	2. 4589	2 27 32	2. 4507	2 27 03	2. 4424	2 26 33	12
13	2. 4644	2 27 51	2. 4562	2 27 22	2. 4480	2 26 53	2. 4397	2 26 23	13
14	2. 4617	2 27 42	2. 4535	2 27 12	2. 4453	2 26 43	2. 4370	2 26 13	14
15	2. 4590	2 27 32	2. 4508	2 27 02	2. 4427	2 26 34	2. 4344	2 26 04	15
16	2. 4563	2 27 23	2. 4481	2 26 53	2. 4400	2 26 24	2. 4317	2 25 54	16
17	2. 4536	2 27 13	2. 4454	2 26 43	2. 4373	2 26 14	2. 4291	2 25 45	17
18	2. 4510	2 27 04	2. 4427	2 26 34	2. 4347	2 26 05	2. 4265	2 25 36	18
19	2. 4483	2 26 54	2. 4401	2 26 24	2. 4320	2 25 55	2. 4238	2 25 26	19
20	2. 4457	2 26 45	2. 4375	2 26 15	2. 4293	2 25 46	2. 4212	2 25 16	20
21	2. 4430	2 26 35	2. 4348	2 26 05	2. 4268	2 25 36	2. 4186	2 25 07	21
22	2. 4403	2 26 25	2. 4322	2 25 56	2. 4241	2 25 27	2. 4160	2 24 58	22
23	2. 4377	2 26 16	2. 4296	2 25 47	2. 4215	2 25 17	2. 4134	2 24 48	23
24	2. 4350	2 26 06	2, 4270	2 25 37	2. 4189	2 25 08	2. 4107	2 24 39	24
25	2. 4324	2 25 57	2. 4243	2 25 27	2. 4163	2 24 59	2. 4081	2 24 29	25
26	2. 4298	2 25 47	2. 4217	2 25 18	2. 4136	2 24 49	2. 4055	2 24 20	26
27	2. 4272	2 25 38	2. 4191	2 25 08	2. 4110	2 24 40	2. 4029	2 24 10	27
28	2. 4246	2 25 29	2. 4165	2 24 59	2. 4084	2 24 30	2. 4003	2 24 01	28
29	2. 4220	2 25 19	2. 4139	2 24 50	2. 4058	2 24 21	2. 3977	2 23 52	29
30	2. 4194	2 25 09	2. 4113	2 24 41	2. 4032	2 24 12	2. 3952	2 23 43	30
31	2. 4168	2 25 00	2. 4086	2 24 31	2. 4006	2 24 02	2. 3926	2 23 33	31
32	2. 4142	2 24 50	2. 4060	2 24 22	2. 3981	2 23 53	2. 3900	2 23 24	32
33	2. 4116	2 24 41	2. 4035	2 24 13	2. 3956	2 23 44	2. 3874	2 23 15	33
34	2. 4090	2 24 32	2. 4009	2 24 03	2. 3930	2 23 34	2. 3848	2 23 05	34
35	2. 4064	2 24 23	2. 3984	2 23 54	2. 3904	2 23 25	2. 3822	2 22 56	35
36	2. 4038	2 24 14	2. 3958	2 23 45	2. 3878	2 23 16	2. 3797	2 22 47	36
37	2. 4013	2 24 05	2. 3932	2 23 36	2. 3853	2 23 07	2. 3772	2 22 38	37
38	2. 3987	2 23 55	2. 3907	2 23 27	2. 3828	2 22 58	2. 3747	2 22 29	38
39	2. 3962	2 23 46	2. 3881	2 23 17	2. 3802	2 22 49	2. 3722	2 22 20	39
40	2. 3936	2 23 37	2. 3856	2 23 08	2. 3777	2 22 40	2. 3697	2 22 11	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$9^h\ 32^m\ 00^s$		$9^h\ 32^m\ 30^s$		$9^h\ 33^m\ 00^s$		$9^h\ 33^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	2.4640	2 27 50	2.4556	2 27 20	2.4478	2 26 50	2.4390	2 26 20	1
2	2.4612	2 27 41	2.4529	2 27 10	2.4446	2 26 41	2.4372	2 26 10	2
3	2.4585	2 27 31	2.4502	2 27 01	2.4419	2 26 31	2.4335	2 26 01	3
4	2.4557	2 27 21	2.4475	2 26 51	2.4392	2 26 21	2.4308	2 25 51	4
5	2.4530	2 27 11	2.4448	2 26 41	2.4365	2 26 11	2.4281	2 25 41	5
6	2.4503	2 27 01	2.4421	2 26 32	2.4338	2 26 02	2.4255	2 25 32	6
7	2.4476	2 26 51	2.4394	2 26 22	2.4311	2 25 52	2.4228	2 25 22	7
8	2.4449	2 26 42	2.4367	2 26 12	2.4284	2 25 42	2.4201	2 25 12	8
9	2.4423	2 26 32	2.4341	2 26 03	2.4257	2 25 33	2.4175	2 25 03	9
10	2.4396	2 26 23	2.4313	2 25 53	2.4231	2 25 23	2.4148	2 24 53	10
11	2.4369	2 26 13	2.4287	2 25 43	2.4204	2 25 13	2.4122	2 24 44	11
12	2.4343	2 26 03	2.4260	2 25 34	2.4178	2 25 04	2.4096	2 24 35	12
13	2.4316	2 25 54	2.4233	2 25 24	2.4151	2 24 54	2.4069	2 24 25	13
14	2.4289	2 25 44	2.4206	2 25 14	2.4125	2 24 45	2.4043	2 24 15	14
15	2.4262	2 25 35	2.4180	2 25 05	2.4099	2 24 36	2.4017	2 24 06	15
16	2.4236	2 25 25	2.4154	2 24 55	2.4072	2 24 26	2.3990	2 23 56	16
17	2.4210	2 25 15	2.4128	2 24 46	2.4046	2 24 17	2.3964	2 23 47	17
18	2.4184	2 25 06	2.4102	2 24 37	2.4020	2 24 07	2.3938	2 23 38	18
19	2.4157	2 24 57	2.4075	2 24 27	2.3994	2 23 57	2.3911	2 23 28	19
20	2.4130	2 24 47	2.4049	2 24 18	2.3967	2 23 48	2.3886	2 23 19	20
21	2.4104	2 24 37	2.4023	2 24 08	2.3942	2 23 39	2.3860	2 23 10	21
22	2.4078	2 24 28	2.3997	2 23 59	2.3915	2 23 29	2.3834	2 23 00	22
23	2.4052	2 24 19	2.3971	2 23 50	2.3890	2 23 20	2.3809	2 22 51	23
24	2.4026	2 24 09	2.3945	2 23 40	2.3865	2 23 11	2.3783	2 22 42	24
25	2.4000	2 24 00	2.3919	2 23 31	2.3838	2 23 02	2.3756	2 22 32	25
26	2.3974	2 23 51	2.3894	2 23 22	2.3812	2 22 52	2.3731	2 22 23	26
27	2.3948	2 23 41	2.3868	2 23 12	2.3786	2 22 43	2.3706	2 22 13	27
28	2.3923	2 23 32	2.3842	2 23 03	2.3761	2 22 34	2.3680	2 22 04	28
29	2.3897	2 23 23	2.3816	2 22 54	2.3735	2 22 25	2.3654	2 21 55	29
30	2.3871	2 23 14	2.3790	2 22 44	2.3710	2 22 16	2.3629	2 21 46	30
31	2.3845	2 23 04	2.3765	2 22 35	2.3684	2 22 06	2.3604	2 21 37	31
32	2.3819	2 22 55	2.3739	2 22 26	2.3658	2 21 57	2.3578	2 21 28	32
33	2.3794	2 22 46	2.3714	2 22 17	2.3633	2 21 48	2.3553	2 21 19	33
34	2.3769	2 22 37	2.3688	2 22 08	2.3608	2 21 39	2.3528	2 21 10	34
35	2.3743	2 22 27	2.3663	2 21 59	2.3583	2 21 30	2.3503	2 21 01	35
36	2.3718	2 22 18	2.3638	2 21 50	2.3557	2 21 21	2.3477	2 20 52	36
37	2.3692	2 22 09	2.3613	2 21 41	2.3533	2 21 12	2.3453	2 20 43	37
38	2.3667	2 22 00	2.3587	2 21 32	2.3508	2 21 03	2.3428	2 20 34	38
39	2.3642	2 21 51	2.3562	2 21 23	2.3482	2 20 54	2.3402	2 20 25	39
40	2.3617	2 21 42	2.3537	2 21 13	2.3457	2 20 45	2.3378	2 20 16	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$9^h\ 34^m\ 00^s$		$9^h\ 34^m\ 30^s$		$9^h\ 35^m\ 00^s$		$9^h\ 35^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	2. 4306	2 25 50	2. 4223	2 25 20	2. 4141	2 24 50	2. 4057	2 24 21	1
2	2. 4278	2 25 40	2. 4196	2 25 11	2. 4113	2 24 40	2. 4030	2 24 11	2
3	2. 4252	2 25 31	2. 4169	2 25 01	2. 4086	2 24 31	2. 4003	2 24 02	3
4	2. 4225	2 25 21	2. 4142	2 24 51	2. 4060	2 24 21	2. 3977	2 23 52	4
5	2. 4199	2 25 12	2. 4116	2 24 42	2. 4033	2 24 12	2. 3951	2 23 43	5
6	2. 4172	2 25 02	2. 4089	2 24 32	2. 4006	2 24 02	2. 3924	2 23 33	6
7	2. 4145	2 24 52	2. 4062	2 24 22	2. 3979	2 23 52	2. 3898	2 23 23	7
8	2. 4118	2 24 42	2. 4036	2 24 13	2. 3955	2 23 43	2. 3871	2 23 14	8
9	2. 4092	2 24 33	2. 4010	2 24 04	2. 3928	2 23 34	2. 3845	2 23 05	9
10	2. 4066	2 24 24	2. 3983	2 23 54	2. 3901	2 23 25	2. 3819	2 22 55	10
11	2. 4039	2 24 14	2. 3957	2 23 45	2. 3875	2 23 15	2. 3794	2 22 46	11
12	2. 4014	2 24 05	2. 3931	2 23 35	2. 3849	2 23 06	2. 3767	2 22 37	12
13	2. 3987	2 23 55	2. 3905	2 23 26	2. 3822	2 22 56	2. 3741	2 22 27	13
14	2. 3960	2 23 46	2. 3878	2 23 16	2. 3797	2 22 47	2. 3714	2 22 17	14
15	2. 3934	2 23 36	2. 3852	2 23 07	2. 3771	2 22 38	2. 3689	2 22 08	15
16	2. 3908	2 23 27	2. 3826	2 22 57	2. 3745	2 22 28	2. 3662	2 21 58	16
17	2. 3882	2 23 18	2. 3800	2 22 48	2. 3718	2 22 18	2. 3637	2 21 49	17
18	2. 3855	2 23 08	2. 3775	2 22 39	2. 3692	2 22 09	2. 3612	2 21 40	18
19	2. 3830	2 22 59	2. 3748	2 22 29	2. 3664	2 22 00	2. 3585	2 21 31	19
20	2. 3804	2 22 49	2. 3723	2 22 20	2. 3636	2 21 51	2. 3560	2 21 21	20
21	2. 3778	2 22 40	2. 3697	2 22 11	2. 3619	2 21 42	2. 3535	2 21 12	21
22	2. 3752	2 22 31	2. 3671	2 22 02	2. 3593	2 21 32	2. 3509	2 21 03	22
23	2. 3727	2 22 22	2. 3645	2 21 52	2. 3567	2 21 23	2. 3483	2 20 54	23
24	2. 3701	2 22 12	2. 3620	2 21 43	2. 3541	2 21 14	2. 3458	2 20 45	24
25	2. 3676	2 22 03	2. 3595	2 21 34	2. 3515	2 21 05	2. 3433	2 20 36	25
26	2. 3650	2 21 54	2. 3569	2 21 25	2. 3489	2 20 56	2. 3407	2 20 27	26
27	2. 3624	2 21 45	2. 3543	2 21 15	2. 3463	2 20 47	2. 3382	2 20 18	27
28	2. 3599	2 21 36	2. 3518	2 21 06	2. 3438	2 20 37	2. 3357	2 20 09	28
29	2. 3574	2 21 27	2. 3493	2 20 57	2. 3413	2 20 28	2. 3332	2 20 00	29
30	2. 3549	2 21 18	2. 3468	2 20 48	2. 3387	2 20 20	2. 3307	2 19 51	30
31	2. 3523	2 21 09	2. 3442	2 20 39	2. 3362	2 20 11	2. 3282	2 19 41	31
32	2. 3497	2 20 59	2. 3417	2 20 30	2. 3337	2 20 01	2. 3257	2 19 32	32
33	2. 3472	2 20 50	2. 3392	2 20 21	2. 3312	2 19 52	2. 3232	2 19 24	33
34	2. 3447	2 20 41	2. 3367	2 20 12	2. 3287	2 19 43	2. 3207	2 19 15	34
35	2. 3423	2 20 32	2. 3342	2 20 03	2. 3262	2 19 34	2. 3182	2 19 06	35
36	2. 3397	2 20 23	2. 3317	2 19 54	2. 3237	2 19 25	2. 3157	2 18 57	36
37	2. 3373	2 20 14	2. 3293	2 19 45	2. 3213	2 19 17	2. 3133	2 18 48	37
38	2. 3348	2 20 05	2. 3268	2 19 36	2. 3188	2 19 08	2. 3108	2 18 39	38
39	2. 3323	2 19 56	2. 3243	2 19 27	2. 3163	2 18 59	2. 3083	2 18 30	39
40	2. 3298	2 19 47	2. 3218	2 19 18	2. 3138	2 18 50	2. 3059	2 18 21	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$9^h\ 36^m\ 00^s$		$9^h\ 36^m\ 30^s$		$9^h\ 37^m\ 00^s$		$9^h\ 37^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	2. 3973	2 22 50	2. 3890	2 23 20	2. 3807	2 22 51	2. 3724	2 22 21	1
2	2. 3947	2 22 40	2. 3863	2 23 10	2. 3781	2 22 41	2. 3697	2 22 11	2
3	2. 3921	2 22 30	2. 3837	2 23 00	2. 3754	2 22 31	2. 3671	2 22 02	3
4	2. 3894	2 22 20	2. 3811	2 22 50	2. 3728	2 22 22	2. 3645	2 21 52	4
5	2. 3867	2 22 11	2. 3785	2 22 40	2. 3702	2 22 13	2. 3619	2 21 43	5
6	2. 3841	2 22 02	2. 3758	2 22 31	2. 3676	2 22 03	2. 3593	2 21 33	6
7	2. 3814	2 22 52	2. 3732	2 22 22	2. 3649	2 21 54	2. 3567	2 21 24	7
8	2. 3788	2 22 43	2. 3706	2 22 13	2. 3623	2 21 44	2. 3541	2 21 15	8
9	2. 3762	2 22 34	2. 3680	2 22 04	2. 3597	2 21 35	2. 3515	2 21 05	9
10	2. 3736	2 22 25	2. 3654	2 21 55	2. 3571	2 21 26	2. 3489	2 20 56	10
11	2. 3710	2 22 16	2. 3628	2 21 45	2. 3546	2 21 17	2. 3464	2 20 47	11
12	2. 3683	2 22 06	2. 3602	2 21 36	2. 3520	2 21 07	2. 3438	2 20 38	12
13	2. 3657	2 21 56	2. 3576	2 21 27	2. 3495	2 20 58	2. 3412	2 20 29	13
14	2. 3632	2 21 46	2. 3550	2 21 18	2. 3469	2 20 48	2. 3386	2 20 19	14
15	2. 3607	2 21 37	2. 3525	2 21 08	2. 3443	2 20 39	2. 3361	2 20 10	15
16	2. 3581	2 21 28	2. 3499	2 20 58	2. 3417	2 20 30	2. 3336	2 20 00	16
17	2. 3555	2 21 19	2. 3473	2 20 49	2. 3392	2 20 21	2. 3310	2 19 51	17
18	2. 3529	2 21 10	2. 3448	2 20 40	2. 3366	2 20 12	2. 3284	2 19 42	18
19	2. 3503	2 21 01	2. 3422	2 20 31	2. 3341	2 20 03	2. 3259	2 19 33	19
20	2. 3478	2 20 51	2. 3397	2 20 22	2. 3315	2 19 54	2. 3234	2 19 24	20
21	2. 3453	2 20 42	2. 3371	2 20 13	2. 3290	2 19 45	2. 3209	2 19 15	21
22	2. 3427	2 20 33	2. 3346	2 20 04	2. 3265	2 19 36	2. 3184	2 19 06	22
23	2. 3401	2 20 24	2. 3321	2 19 55	2. 3240	2 19 26	2. 3159	2 18 57	23
24	2. 3376	2 20 15	2. 3295	2 19 46	2. 3214	2 19 17	2. 3133	2 18 48	24
25	2. 3351	2 20 06	2. 3270	2 19 37	2. 3189	2 19 08	2. 3108	2 18 39	25
26	2. 3326	2 19 57	2. 3245	2 19 28	2. 3164	2 18 59	2. 3083	2 18 30	26
27	2. 3301	2 19 48	2. 3220	2 19 19	2. 3139	2 18 49	2. 3058	2 18 21	27
28	2. 3276	2 19 39	2. 3195	2 19 10	2. 3114	2 18 41	2. 3033	2 18 12	28
29	2. 3251	2 19 30	2. 3170	2 19 01	2. 3090	2 18 32	2, 3008	2 18 03	29
30	2. 3226	2 19 21	2. 3145	2 18 52	2. 3065	2 18 23	2. 2984	2 17 54	30
31	2. 3201	2 19 12	2. 3120	2 18 43	2. 3040	2 18 14	2. 2959	2 17 45	31
32	2. 3176	2 19 03	2. 3095	2 18 34	2. 3015	2 18 05	2. 2935	2 17 37	32
33	2. 3151	2 18 54	2. 3070	2 18 25	2. 2990	2 17 56	2. 2910	2 17 28	33
34	2. 3126	2 18 45	2. 3045	2 18 16	2. 2966	2 17 48	2. 2886	2 17 19	34
35	2. 3102	2 18 37	2. 3021	2 18 07	2. 2941	2 17 39	2. 2861	2 17 10	35
36	2. 3077	2 18 28	2. 2996	2 17 59	2. 2916	2 17 30	2. 2837	2 17 01	36
37	2. 3052	2 18 19	2. 2972	2 17 50	2. 2891	2 17 21	2. 2813	2 16 53	37
38	2. 3028	2 18 10	2. 2947	2 17 41	2. 2866	2 17 12	2. 2788	2 16 44	38
39	2. 3004	2 18 01	2. 2923	2 17 32	2. 2841	2 17 03	2. 2764	2 16 35	39
40	2. 2979	2 17 52	2. 2899	2 17 24	2. 2817	2 16 55	2. 2739	2 16 26	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$9^h\ 38^m\ 00^s$		$9^h\ 38^m\ 30^s$		$9^h\ 39^m\ 00^s$		$9^h\ 39^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	2. 3642	2 21 51	2. 3557	2 21 21	2. 3474	2 20 51	2. 3391	2 20 21	1
2	2. 3614	2 21 41	2. 3531	2 21 11	2. 3448	2 20 41	2. 3365	2 20 11	2
3	2. 3588	2 21 32	2. 3505	2 21 02	2. 3422	2 20 32	2. 3339	2 20 02	3
4	2. 3562	2 21 22	2. 3478	2 20 52	2. 3396	2 20 22	2. 3313	2 19 53	4
5	2. 3536	2 21 13	2. 3452	2 20 43	2. 3370	2 20 13	2. 3287	2 19 43	5
6	2. 3510	2 21 03	2. 3427	2 20 34	2. 3344	2 20 04	2. 3261	2 19 34	6
7	2. 3484	2 20 54	2. 3401	2 20 24	2. 3318	2 19 54	2. 3235	2 19 25	7
8	2. 3458	2 20 45	2. 3376	2 20 15	2. 3292	2 19 45	2. 3209	2 19 15	8
9	2. 3432	2 20 36	2. 3350	2 20 06	2. 3267	2 19 36	2. 3184	2 19 06	9
10	2. 3407	2 20 27	2. 3324	2 19 57	2. 3242	2 19 27	2. 3159	2 18 57	10
11	2. 3381	2 20 17	2. 3299	2 19 47	2. 3216	2 19 18	2. 3133	2 18 48	11
12	2. 3355	2 20 08	2. 3273	2 19 38	2. 3191	2 19 09	2. 3108	2 18 39	12
13	2. 3330	2 19 59	2. 3248	2 19 29	2. 3166	2 19 00	2. 3083	2 18 30	13
14	2. 3304	2 19 49	2. 3223	2 19 20	2. 3140	2 18 50	2. 3058	2 18 21	14
15	2. 3278	2 19 40	2. 3197	2 19 11	2. 3115	2 18 41	2. 3033	2 18 12	15
16	2. 3253	2 19 31	2. 3171	2 19 02	2. 3089	2 18 32	2. 3008	2 18 03	16
17	2. 3228	2 19 22	2. 3146	2 18 53	2. 3064	2 18 23	2. 2983	2 17 54	17
18	2. 3203	2 19 13	2. 3121	2 18 44	2. 3039	2 18 14	2. 2958	2 17 45	18
19	2. 3177	2 19 04	2. 3096	2 18 35	2. 3014	2 18 05	2. 2933	2 17 36	19
20	2. 3152	2 18 55	2. 3071	2 18 26	2. 2989	2 17 56	2. 2908	2 17 27	20
21	2. 3127	2 18 46	2. 3046	2 18 16	2. 2964	2 17 47	2. 2883	2 17 18	21
22	2. 3102	2 18 37	2. 3021	2 18 08	2. 2939	2 17 38	2. 2858	2 17 09	22
23	2. 3077	2 18 28	2. 2996	2 17 59	2. 2915	2 17 29	2. 2833	2 17 00	23
24	2. 3052	2 18 19	2. 2971	2 17 50	2. 2890	2 17 20	2. 2809	2 16 51	24
25	2. 3027	2 18 10	2. 2946	2 17 41	2. 2865	2 17 11	2. 2784	2 16 42	25
26	2. 3002	2 18 01	2. 2922	2 17 32	2. 2840	2 17 02	2. 2760	2 16 34	26
27	2. 2978	2 17 52	2. 2897	2 17 23	2. 2816	2 16 53	2. 2735	2 16 25	27
28	2. 2953	2 17 43	2. 2872	2 17 14	2. 2791	2 16 45	2. 2710	2 16 16	28
29	2. 2928	2 17 34	2. 2847	2 17 05	2. 2766	2 16 36	2. 2686	2 16 07	29
30	2. 2903	2 17 25	2. 2823	2 16 56	2. 2742	2 16 27	2. 2661	2 15 58	30
31	2. 2879	2 17 16	2. 2798	2 16 47	2. 2717	2 16 18	2. 2637	2 15 49	31
32	2. 2854	2 17 07	2. 2773	2 16 38	2. 2693	2 16 09	2. 2613	2 15 41	32
33	2. 2830	2 16 59	2. 2749	2 16 30	2. 2669	2 16 01	2. 2588	2 15 32	33
34	2. 2806	2 16 50	2. 2724	2 16 21	2. 2644	2 15 52	2. 2564	2 15 23	34
35	2. 2781	2 16 41	2. 2700	2 16 12	2. 2620	2 15 43	2. 2540	2 15 15	35
36	2. 2757	2 16 33	2. 2676	2 16 03	2. 2596	2 15 34	2. 2516	2 15 06	36
37	2. 2732	2 16 24	2. 2652	2 15 55	2. 2572	2 15 26	2. 2492	2 14 57	37
38	2. 2708	2 16 15	2. 2628	2 15 46	2. 2548	2 15 17	2. 2468	2 14 48	38
39	2. 2684	2 16 06	2. 2604	2 15 37	2. 2524	2 15 09	2. 2444	2 14 40	39
40	2. 2660	2 15 58	2. 2580	2 15 29	2. 2500	2 15 00	2. 2420	2 14 31	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$9^h\ 40^m\ 00^s$		$9^h\ 40^m\ 30^s$		$9^h\ 41^m\ 00^s$		$9^h\ 41^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
'	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	'
1	2. 3307	2 19 51	2. 3224	2 19 21	2. 3141	2 18 51	2. 3058	2 18 21	1
2	2. 3281	2 19 41	2. 3198	2 19 11	2. 3115	2 18 41	2. 3032	2 18 11	2
3	2. 3256	2 19 32	2. 3173	2 19 02	2. 3090	2 18 32	2. 3006	2 18 02	3
4	2. 3230	2 19 23	2. 3147	2 18 53	2. 3064	2 18 23	2. 2981	2 17 53	4
5	2. 3205	2 19 14	2. 3122	2 18 44	2. 3038	2 18 14	2. 2956	2 17 44	5
6	2. 3179	2 19 04	2. 3096	2 18 35	2. 3013	2 18 05	2. 2931	2 17 35	6
7	2. 3153	2 18 55	2. 3071	2 18 26	2. 2988	2 17 56	2. 2905	2 17 26	7
8	2. 3128	2 18 46	2. 3046	2 18 16	2. 2963	2 17 47	2. 2880	2 17 17	8
9	2. 3102	2 18 37	2. 3021	2 18 07	2. 2938	2 17 38	2. 2855	2 17 08	9
10	2. 3077	2 18 28	2. 2994	2 17 58	2. 2912	2 17 28	2. 2830	2 16 59	10
11	2. 3052	2 18 19	2. 2969	2 17 49	2. 2887	2 17 19	2. 2805	2 16 50	11
12	2. 3027	2 18 10	2. 2944	2 17 40	2. 2862	2 17 10	2. 2780	2 16 41	12
13	2. 3001	2 18 00	2. 2919	2 17 31	2. 2837	2 17 01	2. 2755	2 16 32	13
14	2. 2976	2 17 51	2. 2894	2 17 22	2. 2812	2 16 52	2. 2730	2 16 23	14
15	2. 2951	2 17 42	2. 2869	2 17 13	2. 2787	2 16 43	2. 2705	2 16 14	15
16	2. 2926	2 17 33	2. 2844	2 17 04	2. 2762	2 16 34	2. 2681	2 16 05	16
17	2. 2901	2 17 24	2. 2819	2 16 55	2. 2737	2 16 25	2. 2656	2 15 56	17
18	2. 2876	2 17 15	2. 2794	2 16 46	2. 2712	2 16 16	2. 2632	2 15 48	18
19	2. 2851	2 17 06	2. 2769	2 16 37	2. 2687	2 16 08	2. 2607	2 15 39	19
20	2. 2826	2 16 57	2. 2745	2 16 28	2. 2663	2 15 59	2. 2582	2 15 30	20
21	2. 2802	2 16 49	2. 2720	2 16 19	2. 2639	2 15 50	2. 2557	2 15 21	21
22	2. 2777	2 16 40	2. 2696	2 16 11	2. 2614	2 15 41	2. 2533	2 15 12	22
23	2. 2753	2 16 31	2. 2671	2 16 02	2. 2589	2 15 32	2. 2509	2 15 03	23
24	2. 2728	2 16 22	2. 2646	2 15 53	2. 2565	2 15 23	2. 2484	2 14 54	24
25	2. 2703	2 16 13	2. 2622	2 15 44	2. 2541	2 15 15	2. 2460	2 14 46	25
26	2. 2679	2 16 04	2. 2598	2 15 35	2. 2517	2 15 06	2. 2435	2 14 37	26
27	2. 2654	2 15 55	2. 2573	2 15 26	2. 2492	2 14 57	2. 2411	2 14 28	27
28	2. 2630	2 15 47	2. 2549	2 15 18	2. 2468	2 14 49	2. 2387	2 14 19	28
29	2. 2605	2 15 38	2. 2525	2 15 09	2. 2444	2 14 40	2. 2363	2 14 11	29
30	2. 2581	2 15 29	2. 2500	2 15 00	2. 2419	2 14 31	2. 2339	2 14 02	30
31	2. 2557	2 15 21	2. 2476	2 14 51	2. 2395	2 14 22	2. 2315	2 13 53	31
32	2. 2533	2 15 12	2. 2452	2 14 43	2. 2371	2 14 14	2. 2291	2 13 45	32
33	2. 2509	2 15 03	2. 2428	2 14 34	2. 2347	2 14 05	2. 2267	2 13 36	33
34	2. 2484	2 14 54	2. 2404	2 14 25	2. 2323	2 13 56	2. 2243	2 13 27	34
35	2. 2460	2 14 46	2. 2380	2 14 17	2. 2299	2 13 48	2. 2219	2 13 19	35
36	2. 2436	2 14 37	2. 2356	2 14 08	2. 2275	2 13 39	2. 2195	2 13 10	36
37	2. 2412	2 14 28	2. 2332	2 14 00.	2. 2251	2 13 30	2. 2172	2 13 02	37
38	2. 2388	2 14 20	2. 2309	2 13 51	2. 2227	2 13 22	2. 2149	2 12 54	38
39	2. 2364	2 14 11	2. 2285	2 13 43	2. 2204	2 13 13	2. 2125	2 12 45	39
40	2. 2340	2 14 03	2. 2261	2 13 34	2. 2181	2 13 05	2. 2101	2 12 36	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$9^h\ 42^m\ 00^s$		$9^h\ 42^m\ 30^s$		$9^h\ 43^m\ 00^s$		$9^h\ 43^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	2. 2975	2 17 51	2. 2891	2 17 21	2. 2808	2 16 51	2. 2725	2 16 21	1
2	2. 2949	2 17 42	2. 2866	2 17 12	2. 2782	2 16 42	2. 2700	2 16 12	2
3	2. 2924	2 17 33	2. 2840	2 17 02	2. 2757	2 16 32	2. 2675	2 16 03	3
4	2. 2898	2 17 23	2. 2815	2 16 53	2. 2731	2 16 23	2. 2650	2 15 54	4
5	2. 2872	2 17 14	2. 2790	2 16 44	2. 2707	2 16 15	2. 2625	2 15 45	5
6	2. 2847	2 17 05	2. 2765	2 16 35	2. 2682	2 16 06	2. 2600	2 15 36	6
7	2. 2822	2 16 56	2. 2740	2 16 26	2. 2656	2 15 56	2. 2574	2 15 27	7
8	2. 2797	2 16 47	2. 2715	2 16 17	2. 2632	2 15 48	2. 2550	2 15 18	8
9	2. 2772	2 16 38	2. 2690	2 16 08	2. 2607	2 15 39	2. 2525	2 15 09	9
10	2. 2747	2 16 29	2. 2665	2 15 59	2. 2582	2 15 30	2. 2500	2 15 00	10
11	2. 2722	2 16 20	2. 2640	2 15 50	2. 2558	2 15 21	2. 2476	2 14 51	11
12	2. 2697	2 16 11	2. 2615	2 15 41	2. 2534	2 15 12	2. 2451	2 14 42	12
13	2. 2672	2 16 02	2. 2590	2 15 32	2. 2508	2 15 03	2. 2426	2 14 33	13
14	2. 2647	2 15 53	2. 2565	2 15 23	2. 2483	2 14 54	2. 2401	2 14 24	14
15	2. 2623	2 15 44	2. 2541	2 15 15	2. 2458	2 14 45	2. 2377	2 14 16	15
16	2. 2599	2 15 36	2. 2516	2 15 06	2. 2433	2 14 36	2. 2353	2 14 07	16
17	2. 2574	2 15 27	2. 2491	2 14 57	2. 2409	2 14 27	2. 2328	2 13 58	17
18	2. 2549	2 15 18	2. 2466	2 14 48	2. 2385	2 14 19	2. 2304	2 13 49	18
19	2. 2524	2 15 09	2. 2442	2 14 39	2. 2361	2 14 10	2. 2280	2 13 41	19
20	2. 2500	2 15 00	2. 2418	2 14 30	2. 2337	2 14 01	2. 2255	2 13 32	20
21	2. 2475	2 14 51	2 2394	2 14 22	2. 2312	2 13 52	2. 2231	2 13 24	21
22	2. 2450	2 14 42	2. 2370	2 14 13	2. 2288	2 13 44	2. 2207	2 13 15	22
23	2. 2426	2 14 33	2. 2345	2 14 04	2. 2264	2 13 35	2. 2183	2 13 06	23
24	2. 2402	2 14 25	2. 2321	2 13 56	2. 2240	2 13 26	2. 2159	2 12 57	24
25	2. 2378	2 14 16	2. 2297	2 13 47	2. 2215	2 13 17	2. 2135	2 12 49	25
26	2. 2354	2 14 07	2. 2273	2 13 38	2. 2192	2 13 09	2. 2112	2 12 40	26
27	2. 2330	2 13 59	2. 2249	2 13 30	2. 2168	2 13 00	2. 2088	2 12 32	27
28	2. 2306	2 13 50	2. 2225	2 13 21	2. 2144	2 12 52	2. 2064	2 12 23	28
29	2. 2282	2 13 42	2. 2201	2 13 12	2. 2120	2 12 43	2. 2040	2 12 14	29
30	2. 2258	2 13 33	2. 2177	2 13 04	2. 2097	2 12 35	2. 2016	2 12 06	30
31	2. 2234	2 13 24	2. 2153	2 12 55	2. 2073	2 12 27	2. 1992	2 11 57	31
32	2. 2210	2 13 16	2. 2130	2 12 47	2. 2049	2 12 18	2. 1969	2 11 49	32
33	2. 2187	2 13 07	2. 2107	2 12 39	2. 2025	2 12 09	2. 1946	2 11 41	33
34	2. 2163	2 12 59	2. 2083	2 12 30	2. 2001	2 12 00	2. 1922	2 11 32	34
35	2. 2139	2 12 50	2. 2059	2 12 21	2. 1978	2 11 52	2. 1899	2 11 24	35
36	2. 2115	2 12 41	2. 2035	2 12 13	2. 1955	2 11 44	2. 1875	2 11 15	36
37	2. 2092	2 12 33	2. 2011	2 12 04	2. 1932	2 11 36	2. 1852	2 11 07	37
38	2. 2068	2 12 24	2. 1988	2 11 56	2. 1908	2 11 27	2. 1829	2 10 58	38
39	2. 2044	2 12 16	2. 1965	2 11 47	2. 1885	2 11 19	2. 1806	2 10 50	39
40	2. 2021	2 12 07	2. 1941	2 11 39	2. 1862	2 11 10	2. 1782	2 10 41	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$9^h\ 44^m\ 00^s$		$9^h\ 44^m\ 30^s$		$9^h\ 45^m\ 00^s$		$9^h\ 45^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
'	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	'
1	2. 2642	2 15 51	2. 2558	2 15 21	2. 2475	2 14 51	2. 2393	2 14 21	1
2	2. 2616	2 15 42	2. 2533	2 15 12	2. 2450	2 14 42	2. 2368	2 14 12	2
3	2. 2591	2 15 33	2. 2508	2 15 03	2. 2425	2 14 33	2. 2343	2 14 03	3
4	2. 2566	2 15 24	2. 2483	2 14 54	2. 2401	2 14 24	2. 2318	2 13 54	4
5	2. 2541	2 15 15	2. 2458	2 14 45	2. 2376	2 14 15	2. 2293	2 13 45	5
6	2. 2516	2 15 06	2. 2433	2 14 36	2. 2351	2 14 06	2. 2269	2 13 37	6
7	2. 2491	2 14 57	2. 2409	2 14 27	2. 2326	2 13 57	2. 2244	2 13 28	7
8	2. 2467	2 14 48	2. 2384	2 14 18	2. 2302	2 13 49	2. 2219	2 13 19	8
9	2. 2443	2 14 39	2. 2360	2 14 10	2. 2278	2 13 40	2. 2195	2 13 10	9
10	2. 2418	2 14 30	2. 2335	2 14 01	2. 2253	2 13 31	2. 2171	2 13 02	10
11	2. 2393	2 14 21	2. 2311	2 13 52	2. 2229	2 13 22	2. 2147	2 12 53	11
12	2. 2369	2 14 13	2. 2287	2 13 43	2. 2204	2 13 13	2. 2123	2 12 44	12
13	2. 2344	2 14 04	2. 2262	2 13 34	2. 2180	2 13 05	2. 2098	2 12 35	13
14	2. 2319	2 13 55	2. 2237	2 13 25	2. 2156	2 12 57	2. 2074	2 12 27	14
15	2. 2295	2 13 46	2. 2212	2 13 16	2. 2132	2 12 48	2. 2049	2 12 18	15
16	2. 2270	2 13 37	2. 2188	2 13 08	2. 2108	2 12 39	2. 2025	2 12 09	16
17	2. 2246	2 13 29	2. 2164	2 12 59	2. 2084	2 12 30	2. 2001	2 12 00	17
18	2. 2222	2 13 20	2. 2140	2 12 50	2. 2059	2 12 21	2. 1977	2 11 52	18
19	2. 2198	2 13 11	2. 2116	2 12 42	2. 2035	2 12 13	2. 1953	2 11 43	19
20	2. 2174	2 13 02	2. 2092	2 12 33	2. 2011	2 12 04	2. 1929	2 11 35	20
21	2. 2150	2 12 54	2. 2068	2 12 24	2. 1987	2 11 55	2. 1906	2 11 26	21
22	2. 2126	2 12 45	2. 2044	2 12 16	2. 1964	2 11 47	2. 1883	2 11 18	22
23	2. 2102	2 12 37	2. 2021	2 12 07	2. 1940	2 11 38	2. 1859	2 11 09	23
24	2. 2078	2 12 28	2. 1997	2 11 59	2. 1916	2 11 30	2. 1835	2 11 01	24
25	2. 2054	2 12 19	2. 1973	2 11 50	2. 1892	2 11 21	2. 1811	2 10 52	25
26	2. 2030	2 12 11	2. 1950	2 11 42	2. 1869	2 11 13	2. 1788	2 10 44	26
27	2. 2007	2 12 03	2. 1926	2 11 33	2. 1845	2 11 04	2. 1765	2 10 35	27
28	2. 1983	2 11 54	2. 1902	2 11 25	2. 1822	2 10 56	2. 1741	2 10 27	28
29	2. 1959	2 11 45	2. 1878	2 11 16	2. 1798	2 10 47	2. 1718	2 10 18	29
30	2. 1935	2 11 37	2. 1855	2 11 08	2. 1774	2 10 39	2. 1694	2 10 09	30
31	2. 1912	2 11 28	2. 1832	2 11 00	2. 1751	2 10 30	2. 1671	2 10 01	31
32	2. 1889	2 11 20	2. 1808	2 10 51	2. 1728	2 10 22	2. 1648	2 09 53	32
33	2. 1866	2 11 12	2. 1785	2 10 43	2. 1705	2 10 14	2. 1625	2 09 45	33
34	2. 1842	2 11 03	2. 1761	2 10 34	2. 1682	2 10 06	2. 1601	2 09 36	34
35	2. 1818	2 10 54	2. 1738	2 10 26	2. 1658	2 09 57	2. 1578	2 09 28	35
36	2. 1795	2 10 46	2. 1715	2 10 17	2. 1635	2 09 49	2. 1555	2 09 20	36
37	2. 1772	2 10 38	2. 1692	2 10 09	2. 1612	2 09 40	2. 1532	2 09 11	37
38	2. 1749	2 10 30	2. 1669	2 10 01	2. 1589	2 09 32	2. 1509	2 09 03	38
39	2. 1725	2 10 22	2. 1646	2 09 53	2. 1566	2 09 23	2. 1486	2 08 55	39
40	2. 1702	2 10 13	2. 1622	2 09 44	2. 1543	2 09 15	2. 1463	2 08 47	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$9^h\ 46^m\ 00^s$		$9^h\ 46^m\ 30^s$		$9^h\ 47^m\ 00^s$		$9^h\ 47^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	2. 2309	2 13 51	2. 2225	2 13 21	2. 2142	2 12 51	2. 2058	2 12 21	1
2	2. 2284	2 13 42	2. 2200	2 13 12	2. 2117	2 12 42	2. 2034	2 12 12	1
3	2. 2260	2 13 34	2. 2175	2 13 03	2. 2093	2 12 33	2. 2010	2 12 04	3
4	2. 2235	2 13 25	2. 2151	2 12 54	2. 2068	2 12 24	2. 1986	2 11 55	4
5	2. 2210	2 13 16	2. 2127	2 12 46	2. 2044	2 12 15	2. 1962	2 11 46	5
6	2. 2186	2 13 07	2. 2103	2 12 37	2. 2019	2 12 06	2. 1937	2 11 37	6
7	2. 2161	2 12 58	2. 2079	2 12 28	2. 1995	2 11 58	2. 1913	2 11 29	7
8	2. 2137	2 12 49	2. 2054	2 12 19	2. 1971	2 11 50	2. 1889	2 11 20	8
9	2. 2113	2 12 41	2. 2030	2 12 11	2. 1947	2 11 41	2. 1865	2 11 12	9
10	2. 2088	2 12 32	2. 2005	2 12 02	2. 1923	2 11 32	2. 1841	2 11 03	10
11	2. 2063	2 12 23	2. 1981	2 11 53	2. 1899	2 11 24	2. 1817	2 10 54	11
12	2. 2039	2 12 14	2. 1957	2 11 45	2. 1875	2 11 15	2. 1794	2 10 46	12
13	2. 2015	2 12 05	2. 1933	2 11 36	2. 1851	2 11 06	2. 1770	2 10 37	13
14	2. 1991	2 11 57	2. 1909	2 11 27	2. 1827	2 10 58	2. 1746	2 10 29	14
15	2. 1967	2 11 48	2. 1885	2 11 19	2. 1803	2 10 49	2. 1722	2 10 20	15
16	2. 1943	2 11 39	2. 1861	2 11 10	2. 1779	2 10 40	2. 1698	2 10 11	16
17	2. 1919	2 11 31	2. 1837	2 11 02	2. 1756	2 10 32	2. 1674	2 10 02	17
18	2. 1896	2 11 23	2. 1813	2 10 53	2. 1732	2 10 24	2. 1651	2 09 54	18
19	2. 1872	2 11 14	2. 1789	2 10 44	2. 1708	2 10 15	2. 1627	2 09 46	19
20	2. 1848	2 11 05	2. 1765	2 10 35	2. 1685	2 10 07	2. 1603	2 09 37	20
21	2. 1825	2 10 57	2. 1742	2 10 27	2. 1661	2 09 58	2. 1580	2 09 29	21
22	2. 1801	2 10 48	2. 1718	2 10 18	2. 1638	2 09 50	2. 1557	2 09 21	22
23	2. 1778	2 10 40	2. 1695	2 10 10	2. 1614	2 09 41	2. 1533	2 09 12	23
24	2. 1754	2 10 31	2. 1672	2 10 02	2. 1590	2 09 32	2. 1510	2 09 04	24
25	2. 1730	2 10 23	2. 1649	2 09 53	2. 1567	2 09 24	2. 1486	2 08 55	25
26	2. 1707	2 10 15	2. 1625	2 09 44	2. 1544	2 09 16	2. 1463	2 08 47	26
27	2. 1684	2 10 06	2. 1602	2 09 36	2. 1521	2 09 08	2. 1440	2 08 38	27
28	2. 1660	2 09 58	2. 1579	2 09 28	2. 1498	2 08 59	2. 1417	2 08 30	28
29	2. 1637	2 09 49	2. 1555	2 09 19	2. 1475	2 08 51	2. 1394	2 08 22	29
30	2. 1613	2 09 41	2. 1532	2 09 11	2. 1452	2 08 42	2. 1371	2 08 14	30
31	2. 1590	2 09 32	2. 1509	2 09 03	2. 1429	2 08 34	2. 1348	2 08 05	31
32	2. 1567	2 09 24	2. 1486	2 08 55	2. 1406	2 08 26	2. 1325	2 07. 57	32
33	2. 1544	2 09 16	2. 1463	2 08 47	2. 1383	2 08 18	2. 1302	2 07 49	33
34	2. 1520	2 09 07	2. 1440	2 08 38	2. 1360	2 08 10	2. 1280	2 07 41	34
35	2. 1497	2 08 59	2. 1417	2 08 30	2. 1337	2 08 01	2. 1257	2 07 33	35
36	2. 1474	2 08 51	2. 1394	2 08 22	2. 1314	2 07 53	2. 1234	2 07 24	36
37	2. 1451	2 08 42	2. 1371	2 08 14	2. 1291	2 07 45	2. 1211	2 07 16	37
38	2. 1429	2 08 34	2. 1349	2 08 06	2. 1269	2 07 37	2. 1188	2 07 08	38
39	2. 1406	2 08 26	2. 1326	2 07 57	2. 1246	2 07 29	2. 1166	2 07 00	39
40	2. 1383	2 08 18	2. 1303	2 07 49	2. 1223	2 07 20	2. 1144	2 06 52	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$9^h\ 48^m\ 00^s$		$9^h\ 48^m\ 30^s$		$9^h\ 49^m\ 00^s$		$9^h\ 49^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	2. 1976	2 11 51	2. 1893	2 11 21	2. 1809	2 10 52	2. 1727	2 10 22	1
2	2. 1952	2 11 43	2. 1869	2 11 13	2. 1785	2 10 43	2. 1702	2 10 13	2
3	2. 1927	2 11 34	2. 1844	2 11 04	2. 1761	2 10 34	2. 1678	2 10 04	3
4	2. 1903	2 11 25	2. 1820	2 10 55	2. 1737	2 10 25	2. 1654	2 09 55	4
5	2. 1878	2 11 16	2. 1796	2 10 47	2. 1713	2 10 17	2. 1630	2 09 47	5
6	2. 1854	2 11 07	2. 1772	2 10 38	2. 1689	2 10 08	2. 1606	2 09 38	6
7	2. 1830	2 10 58	2. 1748	2 10 29	2. 1665	2 10 00	2. 1582	2 09 30	7
8	2. 1806	2 10 50	2. 1724	2 10 21	2. 1641	2 09 51	2. 1558	2 09 21	8
9	2. 1782	2 10 42	2. 1700	2 10 12	2. 1617	2 09 42	2. 1535	2 09 13	9
10	2. 1758	2 10 33	2. 1676	2 10 03	2. 1593	2 09 34	2. 1511	2 09 04	10
11	2. 1735	2 10 25	2. 1653	2 09 55	2. 1570	2 09 25	2. 1487	2 08 55	11
12	2. 1712	2 10 16	2. 1629	2 09 46	2. 1546	2 09 17	2. 1464	2 08 47	12
13	2. 1688	2 10 07	2. 1605	2 09 38	2. 1522	2 09 08	2. 1440	2 08 38	13
14	2. 1664	2 09 58	2. 1581	2 09 29	2. 1498	2 08 59	2. 1417	2 08 30	14
15	2. 1640	2 09 50	2. 1557	2 09 21	2. 1475	2 08 51	2. 1394	2 08 22	15
16	2. 1616	2 09 42	2. 1533	2 09 12	2. 1452	2 08 42	2. 1370	2 08 13	16
17	2. 1593	2 09 33	2. 1510	2 09 04	2. 1429	2 08 34	2. 1347	2 08 05	17
18	2. 1569	2 09 25	2. 1487	2 08 55	2. 1405	2 08 26	2. 1324	2 07 57	18
19	2. 1545	2 09 16	2. 1463	2 08 47	2. 1382	2 08 18	2. 1300	2 07 48	19
20	2. 1522	2 09 08	2. 1440	2 08 38	2. 1359	2 08 09	2. 1277	2 07 40	20
21	2. 1499	2 09 00	2. 1417	2 08 30	2. 1336	2 08 01	2. 1254	2 07 31	21
22	2. 1475	2 08 51	2. 1394	2 08 22	2. 1313	2 07 52	2. 1231	2 07 23	22
23	2. 1452	2 08 43	2. 1371	2 08 14	2. 1290	2 07 44	2. 1208	2 07 15	23
24	2. 1429	2 08 34	2. 1348	2 08 05	2. 1267	2 07 36	2. 1185	2 07 07	24
25	2. 1406	2 08 26	2. 1325	2 07 57	2. 1244	2 07 28	2. 1163	2 06 59	25
26	2. 1383	2 08 18	2. 1302	2 07 48	2. 1221	2 07 19	2. 1140	2 06 50	26
27	2. 1360	2 08 10	2. 1279	2 07 40	2. 1198	2 07 11	2. 1117	2 06 42	27
28	2. 1336	2 08 01	2. 1256	2 07 32	2. 1175	2 07 03	2. 1094	2 06 34	28
29	2. 1313	2 07 53	2. 1233	2 07 23	2. 1152	2 06 55	2. 1071	2 06 26	29
30	2. 1290	2 07 45	2. 1210	2 07 15	2. 1129	2 06 46	2. 1048	2 06 18	30
31	2. 1268	2 07 37	2. 1187	2 07 07	2. 1106	2 06 38	2. 1026	2 06 09	31
32	2. 1245	2 07 28	2. 1164	2 06 59	2. 1083	2 06 30	2. 1003	2 06 01	32
33	2. 1222	2 07 20	2. 1142	2 06 51	2. 1061	2 06 22	2. 0981	2 05 53	33
34	2. 1199	2 07 12	2. 1119	2 06 43	2. 1039	2 06 14	2. 0958	2 05 45	34
35	2. 1176	2 07 03	2. 1096	2 06 35	2. 1016	2 06 06	2. 0936	2 05 37	35
36	2. 1154	2 06 55	2. 1073	2 06 26	2. 0993	2 05 57	2. 0914	2 05 29	36
37	2. 1131	2 06 47	2. 1051	2 06 18	2. 0971	2 05 50	2. 0891	2 05 21	37
38	2. 1109	2 06 39	2. 1029	2 06 10	2. 0949	2 05 42	2. 0869	2 05 13	38
39	2. 1086	2 06 31	2. 1006	2 06 02	2. 0926	2 05 33	2. 0847	2 05 05	39
40	2. 1064	2 06 23	2. 0984	2 05 54	2. 0904	2 05 25	2. 0824	2 04 57	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$9^h\ 50^m\ 00^s$		$9^h\ 50^m\ 30^s$		$9^h\ 51^m\ 00^s$		$9^h\ 51^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	2. 1643	2 09 51	2. 1559	2 09 21	2. 1476	2 08 51	2. 1393	2 08 21	1
2	2. 1619	2 09 43	2. 1535	2 09 13	2. 1452	2 08 43	2. 1369	2 08 13	2
3	2. 1595	2 09 34	2. 1511	2 09 04	2. 1429	2 08 34	2. 1345	2 08 04	3
4	2. 1571	2 09 26	2. 1487	2 08 55	2. 1405	2 08 26	2. 1321	2 07 56	4
5	2. 1547	2 09 17	2. 1464	2 08 47	2. 1381	2 08 17	2. 1298	2 07 48	5
6	2. 1523	2 09 08	2. 1440	2 08 38	2. 1357	2 08 09	2. 1274	2 07 39	6
7	2. 1499	2 09 00	2. 1416	2 08 30	2. 1334	2 08 00	2. 1250	2 07 30	7
8	2. 1475	2 08 51	2. 1392	2 08 21	2. 1310	2 07 52	2. 1227	2 07 22	8
9	2. 1452	2 08 43	2. 1369	2 08 13	2. 1287	2 07 43	2. 1204	2 07 13	9
10	2. 1429	2 08 34	2. 1346	2 08 05	2. 1264	2 07 35	2. 1181	2 07 05	10
11	2. 1405	2 08 25	2. 1322	2 07 56	2. 1240	2 07 26	2. 1158	2 06 57	11
12	2. 1382	2 08 18	2. 1298	2 07 47	2. 1217	2 07 18	2. 1135	2 06 49	12
13	2. 1358	2 08 09	2. 1275	2 07 39	2. 1194	2 07 10	2. 1112	2 06 40	13
14	2. 1335	2 08 01	2. 1252	2 07 31	2. 1171	2 07 02	2. 1089	2 06 32	14
15	2. 1311	2 07 52	2. 1229	2 07 22	2. 1148	2 06 53	2. 1066	2 06 24	15
16	2. 1288	2 07 44	2. 1206	2 07 14	2. 1125	2 06 45	2. 1043	2 06 15	16
17	2. 1265	2 07 35	2. 1183	2 07 06	2. 1102	2 06 37	2. 1020	2 06 07	17
18	2. 1242	2 07 27	2. 1160	2 06 58	2. 1079	2 06 28	2. 0997	2 05 59	18
19	2. 1219	2 07 19	2. 1137	2 06 49	2. 1056	2 06 20	2. 0974	2 05 51	19
20	2. 1196	2 07 10	2. 1114	2 06 41	2. 1033	2 06 12	2. 0951	2 05 42	20
21	2. 1173	2 07 02	2. 1091	2 06 33	2. 1010	2 06 04	2. 0928	2 05 34	21
22	2. 1150	2 06 54	2. 1068	2 06 24	2. 0988	2 05 56	2. 0905	2 05 26	22
23	2. 1127	2 06 46	2. 1045	2 06 16	2. 0965	2 05 47	2. 0882	2 05 18	23
24	2. 1104	2 06 37	2. 1022	2 06 08	2. 0942	2 05 39	2. 0860	2 05 10	24
25	2. 1081	2 06 29	2. 1000	2 06 00	2. 0919	2 05 31	2. 0838	2 05 02	25
26	2. 1059	2 06 21	2. 0977	2 05 52	2. 0897	2 05 23	2. 0815	2 04 53	26
27	2. 1036	2 06 13	2. 0954	2 05 43	2. 0874	2 05 15	2. 0792	2 04 45	27
28	2. 1013	2 06 04	2. 0931	2 05 35	2. 0852	2 05 07	2. 0770	2 04 37	28
29	2. 0990	2 05 56	2. 0909	2 05 27	2. 0829	2 04 58	2. 0748	2 04 29	29
30	2. 0968	2 05 48	2. 0887	2 05 19	2. 0806	2 04 50	2. 0726	2 04 21	30
31	2. 0945	2 05 40	2. 0864	2 05 11	2. 0784	2 04 42	2. 0703	2 04 13	31
32	2. 0922	2 05 32	2. 0841	2 05 03	2. 0761	2 04 34	2. 0681	2 04 05	32
33	2. 0900	2 05 24	2. 0819	2 04 55	2. 0739	2 04 26	2. 0659	2 03 57	33
34	2. 0878	2 05 16	2. 0797	2 04 47	2. 0717	2 04 18	2. 0637	2 03 49	34
35	2. 0855	2 05 08	2. 0775	2 04 39	2. 0695	2 04 10	2. 0615	2 03 41	35
36	2. 0833	2 05 00	2. 0753	2 04 31	2. 0673	2 04 02	2. 0593	2 03 33	36
37	2. 0811	2 04 52	2. 0731	2 04 23	2. 0651	2 03 54	2. 0571	2 03 26	37
38	2. 0789	2 04 44	2. 0709	2 04 15	2. 0629	2 03 46	2. 0549	2 03 18	38
39	2. 0767	2 04 36	2. 0687	2 04 07	2. 0607	2 03 39	2. 0527	2 03 09	39
40	2. 0745	2 04 28	2. 0665	2 03 59	2. 0585	2 03 31	2. 0505	2 03 00	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$9^h\ 52^m\ 00^s$		$9^h\ 52^m\ 30^s$		$9^h\ 53^m\ 00^s$		$9^h\ 53^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	2. 1309	2 07 51	2. 1226	2 07 21	2. 1143	2 06 51	2. 1059	2 06 21	1
2	2. 1285	2 07 43	2. 1202	2 07 13	2. 1119	2 06 43	2. 1036	2 06 13	2
3	2. 1262	2 07 34	2. 1178	2 07 04	2. 1096	2 06 35	2. 1013	2 06 05	3
4	2. 1239	2 07 26	2. 1154	2 06 55	2. 1073	2 06 26	2. 0990	2 05 56	4
5	2. 1215	2 07 17	2. 1131	2 06 47	2. 1050	2 06 18	2. 0967	2 05 48	5
6	2. 1192	2 07 09	2. 1108	2 06 39	2. 1026	2 06 09	2. 0944	2 05 40	6
7	2. 1168	2 07 00	2. 1085	2 06 31	2. 1003	2 06 01	2. 0921	2 05 32	7
8	2. 1145	2 06 52	2. 1062	2 06 22	2. 0980	2 05 53	2. 0898	2 05 23	8
9	2. 1122	2 06 44	2. 1039	2 06 14	2. 0957	2 05 45	2. 0875	2 05 15	9
10	2. 1099	2 06 36	2. 1016	2 06 06	2. 0934	2 05 36	2. 0852	2 05 07	10
11	2. 1076	2 06 27	2. 0993	2 05 57	2. 0911	2 05 28	2. 0829	2 04 58	11
12	2. 1053	2 06 19	2. 0970	2 05 49	2. 0888	2 05 20	2. 0806	2 04 50	12
13	2. 1030	2 06 11	2. 0947	2 05 41	2. 0865	2 05 11	2. 0783	2 04 42	13
14	2. 1007	2 06 03	2. 0924	2 05 33	2. 0843	2 05 03	2. 0760	2 04 34	14
15	2. 0984	2 05 54	2. 0901	2 05 24	2. 0820	2 04 55	2. 0737	2 04 25	15
16	2. 0961	2 05 46	2. 0878	2 05 16	2. 0798	2 04 47	2. 0714	2 04 17	16
17	2. 0938	2 05 38	2. 0855	2 05 08	2. 0775	2 04 39	2. 0691	2 04 09	17
18	2. 0915	2 05 29	2. 0832	2 05 00	2. 0752	2 04 31	2. 0669	2 04 01	18
19	2. 0892	2 05 21	2. 0810	2 04 52	2. 0729	2 04 22	2. 0647	2 03 53	19
20	2. 0870	2 05 13	2. 0788	2 04 44	2. 0707	2 04 14	2. 0625	2 03 45	20
21	2. 0847	2 05 05	2. 0765	2 04 35	2. 0684	2 04 06	2. 0602	2 03 37	21
22	2. 0825	2 04 57	2. 0742	2 04 27	2. 0661	2 03 58	2. 0579	2 03 29	22
23	2. 0802	2 04 49	2. 0719	2 04 19	2. 0639	2 03 50	2. 0557	2 03 21	23
24	2. 0779	2 04 41	2. 0697	2 04 11	2. 0617	2 03 42	2. 0535	2 03 13	24
25	2. 0757	2 04 33	2. 0675	2 04 03	2. 0595	2 03 34	2. 0513	2 03 05	25
26	2. 0734	2 04 24	2. 0653	2 03 55	2. 0573	2 03 26	2. 0491	2 02 57	26
27	2. 0712	2 04 16	2. 0631	2 03 47	2. 0551	2 03 18	2. 0469	2 02 49	27
28	2. 0689	2 04 08	2. 0609	2 03 39	2. 0528	2 03 10	2. 0447	2 02 41	28
29	2. 0667	2 04 00	2. 0587	2 03 31	2. 0506	2 03 02	2. 0425	2 02 33	29
30	2. 0645	2 03 52	2. 0565	2 03 23	2. 0484	2 02 54	2. 0403	2 02 25	30
31	2. 0623	2 03 44	2. 0543	2 03 16	2. 0462	2 02 46	2. 0381	2 02 17	31
32	2. 0601	2 03 36	2. 0521	2 03 08	2. 0440	2 02 38	2. 0359	2 02 09	32
33	2. 0579	2 03 28	2. 0499	2 03 00	2. 0418	2 02 30	2. 0337	2 02 01	33
34	2. 0557	2 03 21	2. 0477	2 02 52	2. 0396	2 02 23	2. 0315	2 01 53	34
35	2. 0535	2 03 13	2. 0455	2 02 44	2. 0375	2 02 15	2. 0293	2 01 45	35
36	2. 0513	2 03 05	2. 0433	2 02 36	2. 0353	2 02 07	2. 0271	2 01 38	36
37	2. 0491	2 02 57	2. 0411	2 02 28	2. 0331	2 01 59	2. 0249	2 01 30	37
38	2. 0469	2 02 49	2. 0389	2 02 20	2. 0309	2 01 51	2. 0228	2 01 22	38
39	2. 0447	2 02 41	2. 0367	2 02 12	2. 0287	2 01 43	2. 0207	2 01 15	39
40	2. 0426	2 02 33	2. 0346	2 02 05	2. 0266	2 01 36	2. 0186	2 01 07	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$9^h\ 54^m\ 00^s$		$9^h\ 54^m\ 30^s$		$9^h\ 55^m\ 00^s$		$9^h\ 55^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	2. 0977	2 05 52	2. 0894	2 05 22	2. 0810	2 04 52	2. 0727	2 04 22	1
2	2. 0953	2 05 43	2. 0871	2 05 13	2. 0787	2 04 43	2. 0704	2 04 13	2
3	2. 0930	2 05 34	2. 0848	2 05 05	2. 0764	2 04 35	2. 0681	2 04 05	3
4	2. 0907	2 05 27	2. 0825	2 04 57	2. 0741	2 04 27	2. 0658	2 03 57	4
5	2. 0884	2 05 18	2. 0802	2 04 48	2. 0718	2 04 18	2. 0635	2 03 49	5
6	2. 0861	2 05 10	2. 0779	2 04 40	2. 0695	2 04 10	2. 0612	2 03 40	6
7	2. 0838	2 05 02	2. 0756	2 04 32	2. 0672	2 04 02	2. 0589	2 03 32	7
8	2. 0815	2 04 53	2. 0733	2 04 24	2. 0649	2 03 54	2. 0566	2 03 24	8
9	2. 0792	2 04 46	2. 0710	2 04 16	2. 0627	2 03 46	2. 0544	2 03 16	9
10	2. 0769	2 04 37	2. 0687	2 04 07	2. 0604	2 03 37	2. 0522	2 03 08	10
11	2. 0746	2 04 29	2. 0664	2 03 59	2. 0581	2 03 29	2. 0499	2 03 00	11
12	2. 0722	2 04 21	2. 0642	2 03 51	2. 0559	2 03 21	2. 0476	2 02 51	12
13	2. 0700	2 04 12	2. 0620	2 03 43	2. 0537	2 03 13	2. 0453	2 02 43	13
14	2. 0678	2 04 04	2. 0596	2 03 35	2. 0514	2 03 05	2. 0431	2 02 35	14
15	2. 0656	2 03 56	2. 0574	2 03 27	2. 0491	2 02 57	2. 0409	2 02 27	15
16	2. 0633	2 03 48	2. 0552	2 03 19	2. 0469	2 02 49	2. 0387	2 02 19	16
17	2. 0611	2 03 40	2. 0529	2 03 10	2. 0447	2 02 41	2. 0365	2 02 11	17
18	2. 0588	2 03 32	2. 0507	2 03 02	2. 0425	2 02 33	2. 0343	2 02 03	18
19	2. 0566	2 03 24	2. 0484	2 02 54	2. 0402	2 02 25	2. 0321	2 01 56	19
20	2. 0543	2 03 15	2. 0462	2 02 46	2. 0380	2 02 17	2. 0299	2 01 48	20
21	2. 0521	2 03 08	2. 0440	2 02 38	2. 0358	2 02 09	2. 0277	2 01 40	21
22	2. 0499	2 03 00	2. 0418	2 02 30	2. 0336	2 02 01	2. 0255	2 01 32	22
23	2. 0477	2 02 52	2. 0396	2 02 23	2. 0314	2 01 53	2. 0233	2 01 24	23
24	2. 0455	2 02 44	2. 0374	2 02 15	2. 0292	2 01 45	2. 0211	2 01 16	24
25	2. 0433	2 02 36	2. 0352	2 02 06	2. 0270	2 01 37	2. 0189	2 01 08	25
26	2. 0411	2 02 28	2. 0330	2 01 58	2. 0248	2 01 29	2. 0167	2 01 00	26
27	2. 0389	2 02 20	2. 0308	2 01 51	2. 0227	2 01 22	2. 0145	2 00 52	27
28	2. 0367	2 02 12	2. 0286	2 01 43	2. 0205	2 01 14	2. 0123	2 00 44	28
29	2. 0345	2 02 04	2. 0264	2 01 35	2. 0183	2 01 06	2. 0102	2 00 37	29
30	2. 0323	2 01 56	2. 0242	2 01 27	2. 0161	2 00 58	2. 0081	2 00 29	30
31	2. 0301	2 01 48	2. 0221	2 01 20	2. 0139	2 00 50	2. 0059	2 00 21	31
32	2. 0279	2 01 40	2. 0199	2 01 12	2. 0118	2 00 42	2. 0038	2 00 14	32
33	2. 0257	2 01 33	2. 0177	2 01 04	2. 0096	2 00 35	2. 0017	2 00 06	33
34	2. 0235	2 01 25	2. 0155	2 00 56	2. 0075	2 00 27	1. 9995	1 59 58	34
35	2. 0213	2 01 17	2. 0133	2 00 48	2. 0054	2 00 19	1. 9973	1 59 50	35
36	2. 0191	2 01 09	2. 0112	2 00 40	2. 0032	2 00 11	1. 9952	1 59 43	36
37	2. 0169	2 01 02	2. 0091	2 00 33	2. 0011	2 00 04	1. 9931	1 59 35	37
38	2. 0148	2 00 54	2. 0069	2 00 25	1. 9990	1 59 56	1. 9909	1 59 27	38
39	2. 0127	2 00 46	2. 0048	2 00 17	1. 9968	1 59 48	1. 9888	1 59 20	39
40	2. 0106	2 00 38	2. 0027	2 00 10	1. 9947	1 59 41	1. 9867	1 59 12	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$9^h\ 56^m\ 00^s$		$9^h\ 56^m\ 30^s$		$9^h\ 57^m\ 00^s$		$9^h\ 57^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	2. 0644	2 03 52	2. 0560	2 03 21	2. 0477	2 02 52	2. 0394	2 02 22	1
2	2. 0621	2 03 44	2. 0537	2 03 13	2. 0454	2 02 43	2. 0371	2 02 14	2
3	2. 0598	2 03 35	2. 0515	2 03 05	2. 0432	2 02 36	2. 0348	2 02 05	3
4	2. 0575	2 03 27	2. 0492	2 02 57	2. 0409	2 02 27	2. 0326	2 01 57	4
5	2. 0552	2 03 19	2. 0470	2 02 49	2. 0387	2 02 19	2. 0304	2 01 49	5
6	2. 0529	2 03 10	2. 0447	2 02 41	2. 0364	2 02 11	2. 0281	2 01 41	6
7	2. 0507	2 03 02	2. 0424	2 02 33	2. 0342	2 02 03	2. 0258	2 01 33	7
8	2. 0484	2 02 54	2. 0402	2 02 25	2. 0319	2 01 55	2. 0236	2 01 25	8
9	2. 0462	2 02 46	2. 0379	2 02 17	2. 0297	2 01 47	2. 0214	2 01 17	9
10	2. 0440	2 02 38	2. 0357	2 02 09	2. 0275	2 01 39	2. 0192	2 01 09	10
11	2. 0417	2 02 30	2. 0335	2 02 01	2. 0253	2 01 31	2. 0170	2 01 01	11
12	2. 0395	2 02 22	2. 0313	2 01 53	2. 0231	2 01 23	2. 0148	2 00 53	12
13	2. 0373	2 02 14	2. 0291	2 01 45	2. 0208	2 01 15	2. 0126	2 00 45	13
14	2. 0350	2 02 06	2. 0268	2 01 37	2. 0186	2 01 07	2. 0104	2 00 37	14
15	2. 0327	2 01 58	2. 0246	2 01 29	2. 0164	2 00 59	2. 0082	2 00 30	15
16	2. 0305	2 01 50	2. 0224	2 01 21	2. 0142	2 00 51	2. 0060	2 00 22	16
17	2. 0283	2 01 42	2. 0202	2 01 13	2. 0120	2 00 43	2. 0038	2 00 14	17
18	2. 0261	2 01 34	2. 0180	2 01 05	2. 0098	2 00 35	2. 0017	2 00 06	18
19	2. 0239	2 01 26	2. 0158	2 00 57	2. 0076	2 00 27	1. 9995	1 59 58	19
20	2. 0217	2 01 18	2. 0136	2 00 49	2. 0054	2 00 19	1. 9973	1 59 50	20
21	2. 0195	2 01 10	2. 0114	2 00 41	2. 0032	2 00 12	1. 9952	1 59 43	21
22	2. 0173	2 01 02	2. 0092	2 00 33	2. 0010	2 00 04	1. 9930	1 59 35	22
23	2. 0151	2 00 54	2. 0070	2 00 25	1. 9988	1 59 56	1. 9908	1 59 27	23
24	2. 0129	2 00 46	2. 0048	2 00 17	1. 9967	1 59 48	1. 9886	1 59 19	24
25	2. 0107	2 00 39	2. 0026	2 00 09	1. 9946	1 59 41	1. 9865	1 59 11	25
26	2. 0085	2 00 31	2. 0004	2 00 01	1. 9925	1 59 33	1. 9843	1 59 03	26
27	2. 0063	2 00 23	1. 9982	1 59 54	1. 9903	1 59 25	1. 9821	1 58 56	27
28	2. 0042	2 00 15	1. 9961	1 59 46	1. 9882	1 59 18	1. 9800	1 58 48	28
29	2. 0021	2 00 07	1. 9940	1 59 38	1. 9860	1 59 10	1. 9779	1 58 41	29
30	2. 0000	2 00 00	1. 9919	1 59 31	1. 9839	1 59 02	1. 9758	1 58 33	30
31	1. 9978	1 59 52	1. 9898	1 59 23	1. 9817	1 58 54	1. 9737	1 58 25	31
32	1. 9956	1 59 44	1. 9876	1 59 15	1. 9796	1 58 46	1. 9716	1 58 18	32
33	1. 9935	1 59 37	1. 9854	1 59 08	1. 9775	1 58 39	1. 9695	1 58 10	33
34	1. 9913	1 59 29	1. 9833	1 59 00	1. 9754	1 58 31	1. 9674	1 58 03	34
35	1. 9892	1 59 21	1. 9812	1 58 52	1. 9733	1 58 24	1. 9653	1 57 55	35
36	1. 9871	1 59 14	1. 9791	1 58 45	1. 9712	1 58 16	1. 9632	1 57 48	36
37	1. 9850	1 59 06	1. 9770	1 58 37	1. 9691	1 58 09	1. 9611	1 57 40	37
38	1. 9829	1 58 58	1. 9749	1 58 30	1. 9670	1 58 01	1. 9590	1 57 32	38
39	1. 9808	1 58 51	1. 9728	1 58 22	1. 9649	1 57 54	1. 9569	1 57 25	39
40	1. 9787	1 58 43	1. 9707	1 58 15	1. 9628	1 57 46	1. 9548	1 57 17	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$9^h\ 58^m\ 00^s$		$9^h\ 58^m\ 30^s$		$9^h\ 59^m\ 00^s$		$9^h\ 59^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	2. 0310	2 01 52	2. 0227	2 01 22	2. 0144	2 00 52	2. 0061	2 00 22	1
2	2. 0288	2 01 44	2. 0205	2 01 14	2. 0121	2 00 44	2. 0049	2 00 14	2
3	2. 0266	2 01 36	2. 0183	2 01 06	2. 0099	2 00 36	2. 0017	2 00 06	3
4	2. 0243	2 01 28	2. 0161	2 00 58	2. 0077	2 00 28	1. 9995	1 59 58	4
5	2. 0221	2 01 20	2. 0138	2 00 50	2. 0055	2 00 20	1. 9973	1 59 50	5
6	2. 0199	2 01 12	2. 0116	2 00 42	2. 0033	2 00 12	1. 9951	1 59 42	6
7	2. 0176	2 01 03	2. 0093	2 00 34	2. 0011	2 00 04	1. 9929	1 59 34	7
8	2. 0154	2 00 55	2. 0071	2 00 26	1. 9989	1 59 56	1. 9907	1 59 26	8
9	2. 0132	2 00 48	2. 0049	2 00 18	1. 9967	1 59 48	1. 9885	1 59 19	9
10	2. 0109	2 00 39	2. 0027	2 00 10	1. 9945	1 59 40	1. 9863	1 59 11	10
11	2. 0087	2 00 31	2. 0005	2 00 02	1. 9923	1 59 32	1. 9841	1 59 03	11
12	2. 0065	2 00 23	1. 9983	1 59 54	1. 9901	1 59 24	1. 9819	1 58 55	12
13	2. 0043	2 00 15	1. 9961	1 59 46	1. 9879	1 59 16	1. 9797	1 58 47	13
14	2. 0022	2 00 08	1. 9940	1 59 38	1. 9858	1 59 09	1. 9775	1 58 39	14
15	2. 0000	2 00 00	1. 9918	1 59 30	1. 9836	1 59 01	1. 9753	1 58 32	15
16	1. 9978	1 59 52	1. 9896	1 59 22	1. 9814	1 58 53	1. 9731	1 58 24	16
17	1. 9956	1 59 44	1. 9874	1 59 15	1. 9792	1 58 45	1. 9710	1 58 16	17
18	1. 9935	1 59 37	1. 9853	1 59 07	1. 9771	1 58 38	1. 9689	1 58 08	18
19	1. 9913	1 59 29	1. 9831	1 58 59	1. 9750	1 58 30	1. 9668	1 58 00	19
20	1. 9891	1 59 21	1. 9810	1 58 52	1. 9728	1 58 22	1. 9647	1 57 52	20
21	1. 9870	1 59 13	1. 9788	1 58 44	1. 9706	1 58 14	1. 9625	1 57 45	21
22	1. 9848	1 59 05	1. 9767	1 58 36	1. 9684	1 58 06	1. 9604	1 57 38	22
23	1. 9827	1 58 58	1. 9746	1 58 29	1. 9663	1 57 59	1. 9583	1 57 30	23
24	1. 9805	1 58 50	1. 9724	1 58 21	1. 9642	1 57 52	1. 9562	1 57 22	24
25	1. 9784	1 58 42	1. 9703	1 58 13	1. 9621	1 57 44	1. 9541	1 57 15	25
26	1. 9762	1 58 34	1. 9681	1 58 05	1. 9600	1 57 36	1. 9519	1 57 07	26
27	1. 9740	1 58 26	1. 9660	1 57 58	1. 9579	1 57 28	1. 9598	1 57 00	27
28	1. 9719	1 58 19	1. 9639	1 57 50	1. 9558	1 57 21	1. 9477	1 56 52	28
29	1. 9698	1 58 11	1. 9618	1 57 42	1. 9537	1 57 14	1. 9456	1 56 44	29
30	1. 9677	1 58 04	1. 9597	1 57 35	1. 9516	1 57 06	1. 9435	1 56 37	30
31	1. 9656	1 57 56	1. 9576	1 57 27	1. 9495	1 56 58	1. 9415	1 56 29	31
32	1. 9635	1 57 49	1. 9555	1 57 20	1. 9474	1 56 51	1. 9394	1 56 22	32
33	1. 9614	1 57 41	1. 9534	1 57 12	1. 9453	1 56 43	1. 9373	1 56 15	33
34	1. 9593	1 57 33	1. 9513	1 57 05	1. 9432	1 56 36	1. 9352	1 56 07	34
35	1. 9572	1 57 26	1. 9492	1 56 57	1. 9411	1 56 28	1. 9331	1 56 00	35
36	1. 9551	1 57 18	1. 9471	1 56 50	1. 9390	1 56 20	1. 9310	1 55 52	36
37	1. 9530	1 57 11	1. 9450	1 56 42	1. 9369	1 56 13	1. 9290	1 55 44	37
38	1. 9509	1 57 03	1. 9429	1 56 34	1. 9348	1 56 05	1. 9270	1 55 37	38
39	1. 9488	1 56 56	1. 9409	1 56 27	1. 9328	1 55 58	1. 9249	1 55 30	39
40	1. 9468	1 56 48	1. 9388	1 56 20	1. 9308	1 55 51	1. 9229	1 55 22	40

Hourly change in longitude to eastward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to eastward.
	$10^h\ 00^m\ 00^s$								
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	1.9978	1 59 52	.....	.....	.....	.....	.....	.....	1
2	1.9956	1 59 44	.....	.....	.....	.....	.....	.....	2
3	1.9934	1 59 36	.....	.....	.....	.....	.....	.....	3
4	1.9912	1 59 28	.....	.....	.....	.....	.....	.....	4
5	1.9890	1 59 20	.....	.....	.....	.....	.....	.....	5
6	1.9868	1 59 12	.....	.....	.....	.....	.....	.....	6
7	1.9846	1 59 04	.....	.....	.....	.....	.....	.....	7
8	1.9824	1 58 56	.....	.....	.....	.....	.....	.....	8
9	1.9802	1 58 49	.....	.....	.....	.....	.....	.....	9
10	1.9780	1 58 41	.....	.....	.....	.....	.....	.....	10
11	1.9758	1 58 33	.....	.....	.....	.....	.....	.....	11
12	1.9736	1 58 25	.....	.....	.....	.....	.....	.....	12
13	1.9715	1 58 17	.....	.....	.....	.....	.....	.....	13
14	1.9694	1 58 10	.....	.....	.....	.....	.....	.....	14
15	1.9672	1 58 02	.....	.....	.....	.....	.....	.....	15
16	1.9650	1 57 54	.....	.....	.....	.....	.....	.....	16
17	1.9629	1 57 46	.....	.....	.....	.....	.....	.....	17
18	1.9608	1 57 39	.....	.....	.....	.....	.....	.....	18
19	1.9586	1 57 31	.....	.....	.....	.....	.....	.....	19
20	1.9565	1 57 23	.....	.....	.....	.....	.....	.....	20
21	1.9544	1 57 16	.....	.....	.....	.....	.....	.....	21
22	1.9523	1 57 08	.....	.....	.....	.....	.....	.....	22
23	1.9502	1 57 00	.....	.....	.....	.....	.....	.....	23
24	1.9481	1 56 53	.....	.....	.....	.....	.....	.....	24
25	1.9460	1 56 45	.....	.....	.....	.....	.....	.....	25
26	1.9439	1 56 38	.....	.....	.....	.....	.....	.....	26
27	1.9418	1 56 31	.....	.....	.....	.....	.....	.....	27
28	1.9397	1 56 23	.....	.....	.....	.....	.....	.....	28
29	1.9376	1 56 15	.....	.....	.....	.....	.....	.....	29
30	1.9355	1 56 08	.....	.....	.....	.....	.....	.....	30
31	1.9335	1 56 00	.....	.....	.....	.....	.....	.....	31
32	1.9314	1 55 53	.....	.....	.....	.....	.....	.....	32
33	1.9293	1 55 45	.....	.....	.....	.....	.....	.....	33
34	1.9272	1 55 38	.....	.....	.....	.....	.....	.....	34
35	1.9251	1 55 31	.....	.....	.....	.....	.....	.....	35
36	1.9230	1 55 23	.....	.....	.....	.....	.....	.....	36
37	1.9210	1 55 16	.....	.....	.....	.....	.....	.....	37
38	1.9190	1 55 08	.....	.....	.....	.....	.....	.....	38
39	1.9169	1 55 01	.....	.....	.....	.....	.....	.....	39
40	1.9149	1 54 54	.....	.....	.....	.....	.....	.....	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$7^h\ 00^m\ 00^s$		$7^h\ 00^m\ 30^s$		$7^h\ 01^m\ 00^s$		$7^h\ 01^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	5. 0056	5 00 20	4. 9972	4 59 50	4. 9889	4 59 20	4. 9805	4 58 50	1
2	5. 0111	5 00 40	5. 0028	5 00 10	4. 9944	4 59 40	4. 9860	4 59 10	2
3	5. 0167	5 00 59	5. 0084	5 00 30	5. 0000	5 00 00	4. 9916	4 59 30	3
4	5. 0223	5 01 20	5. 0140	5 00 50	5. 0056	5 00 20	4. 9972	4 59 50	4
5	5. 0279	5 01 40	5. 0196	5 01 11	5. 0112	5 00 40	5. 0028	5 00 10	5
6	5. 0335	5 02 00	5. 0252	5 01 31	5. 0168	5 01 00	5. 0084	5 00 30	6
7	5. 0392	5 02 20	5. 0308	5 01 51	5. 0224	5 01 21	5. 0140	5 00 50	7
8	5. 0449	5 02 41	5. 0365	5 02 11	5. 0280	5 01 41	5. 0196	5 01 11	8
9	5. 0506	5 03 02	5. 0421	5 02 32	5. 0336	5 02 01	5. 0252	5 01 31	9
10	5. 0562	5 03 22	5. 0478	5 02 52	5. 0393	5 02 21	5. 0309	5 01 51	10
11	5. 0619	5 03 43	5. 0535	5 03 12	5. 0450	5 02 41	5. 0367	5 02 11	11
12	5. 0676	5 04 03	5. 0592	5 03 32	5. 0507	5 03 02	5. 0424	5 02 31	12
13	5. 0733	5 04 23	5. 0649	5 03 53	5. 0564	5 03 22	5. 0481	5 02 51	13
14	5. 0790	5 04 44	5. 0706	5 04 14	5. 0621	5 03 43	5. 0538	5 03 12	14
15	5. 0847	5 05 05	5. 0764	5 04 34	5. 0678	5 04 04	5. 0595	5 03 32	15
16	5. 0905	5 05 25	5. 0821	5 04 55	5. 0735	5 04 25	5. 0652	5 03 53	16
17	5. 0963	5 05 46	5. 0878	5 05 16	5. 0793	5 04 45	5. 0709	5 04 14	17
18	5. 1021	5 06 07	5. 0935	5 05 36	5. 0850	5 05 06	5. 0766	5 04 35	18
19	5. 1078	5 06 28	5. 0993	5 05 57	5. 0908	5 05 27	5. 0823	5 04 55	19
20	5. 1136	5 06 49	5. 1051	5 06 18	5. 0966	5 05 48	5. 0881	5 05 16	20
21	5. 1194	5 07 10	5. 1109	5 06 39	5. 1024	5 06 09	5. 0938	5 05 38	21
22	5. 1253	5 07 31	5. 1168	5 07 00	5. 1082	5 06 29	5. 0996	5 05 58	22
23	5. 1311	5 07 52	5. 1226	5 07 21	5. 1141	5 06 41	5. 1054	5 06 19	23
24	2. 1370	5 08 13	5. 1284	5 07 42	5. 1199	5 07 11	5. 1112	5 06 41	24
25	5. 1428	5 08 34	5. 1343	5 08 03	5. 1257	5 07 32	5. 1170	5 07 02	25
26	5. 1487	5 08 55	5. 1402	5 08 24	5. 1316	5 07 53	5. 1229	5 07 23	26
27	5. 1546	5 09 17	5. 1461	5 08 45	5. 1375	5 08 14	5. 1288	5 07 44	27
28	5. 1605	5 09 38	5. 1520	5 09 07	5. 1434	5 08 35	5. 1347	5 08 05	28
29	5. 1664	5 09 59	5. 1579	5 09 28	5. 1493	5 08 56	5. 1406	5 08 26	29
30	5. 1724	5 10 20	5. 1638	5 09 50	5. 1552	5 09 18	5. 1466	5 08 47	30
31	5. 1784	5 10 41	5. 1698	5 10 11	5. 1611	5 09 39	5. 1525	5 09 08	31
32	5. 1844	5 11 03	5. 1757	5 10 33	5. 1671	5 10 01	5. 1584	5 09 30	32
33	5. 1904	5 11 25	5. 1817	5 10 54	5. 1731	5 10 22	5. 1643	5 09 51	33
34	5. 1964	5 11 47	5. 1877	5 11 16	5. 1791	5 10 44	5. 1702	5 10 12	34
35	5. 2024	5 12 08	5. 1937	5 11 37	5. 1851	5 11 06	5. 1762	5 10 34	35
36	5. 2084	5 12 30	5. 1997	5 11 59	5. 1911	5 11 28	5. 1822	5 10 56	36
37	5. 2144	5 12 52	5. 2057	5 12 21	5. 1971	5 11 50	5. 1882	5 11 18	37
38	5. 2204	5 13 13	5. 2117	5 12 43	5. 2031	5 12 10	5. 1942	5 11 39	38
39	5. 2264	5 13 35	5. 2178	5 13 04	5. 2091	5 12 32	5. 2003	5 12 01	39
40	5. 2325	5 13 57	5. 2238	5 13 25	5. 2151	5 12 54	5. 2064	5 12 23	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$7^h\ 02^m\ 00^s$		$7^h\ 02^m\ 30^s$		$7^h\ 03^m\ 00^s$		$7^h\ 03^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	4.9722	4 58 20	4.9639	4 57 50	4.9556	4 57 20	4.9472	4 56 50	1
2	4.9778	4 58 40	4.9693	4 58 09	4.9610	4 57 40	4.9527	4 57 10	2
3	4.9833	4 59 00	4.9750	4 58 30	4.9666	4 58 00	4.9581	4 57 29	3
4	4.9889	4 59 20	4.9804	4 58 49	4.9721	4 58 20	4.9638	4 57 49	4
5	4.9944	4 59 40	4.9861	4 59 10	4.9777	4 58 40	4.9693	4 58 09	5
6	5.0000	5 00 00	4.9916	4 59 30	4.9832	4 59 00	4.9749	4 58 30	6
7	5.0057	5 00 21	4.9972	4 59 50	4.9889	4 59 20	4.9804	4 58 49	7
8	5.0113	5 00 41	5.0029	5 00 10	4.9944	4 59 40	4.9861	4 59 10	8
9	5.0169	5 01 01	5.0084	5 00 30	5.0000	5 00 00	4.9916	4 59 30	9
10	5.0225	5 01 21	5.0141	5 00 51	5.0057	5 00 21	4.9972	4 59 50	10
11	5.0281	5 01 41	5.0197	5 01 11	5.0113	5 00 41	5.0029	5 00 10	11
12	5.0339	5 02 02	5.0254	5 01 31	5.0170	5 01 01	5.0086	5 00 31	12
13	5.0395	5 02 22	5.0311	5 01 52	5.0226	5 01 21	5.0142	5 00 51	13
14	5.0451	5 02 42	5.0367	5 02 12	5.0283	5 01 42	5.0199	5 01 12	14
15	5.0509	5 03 03	5.0424	5 02 33	5.0340	5 02 02	5.0255	5 01 32	15
16	5.0565	5 03 23	5.0481	5 02 53	5.0397	5 02 23	5.0312	5 01 52	16
17	5.0623	5 03 44	5.0538	5 03 13	5.0453	5 02 43	5.0369	5 02 13	17
18	5.0680	5 04 05	5.0595	5 03 34	5.0510	5 03 04	5.0426	5 02 33	18
19	5.0738	5 04 25	5.0652	5 03 55	5.0567	5 03 24	5.0482	5 02 54	19
20	5.0796	5 04 47	5.0711	5 04 16	5.0625	5 03 45	5.0540	5 03 14	20
21	5.0853	5 05 07	5.0768	5 04 36	5.0683	5 04 06	5.0598	5 03 35	21
22	5.0912	5 05 28	5.0827	5 04 58	5.0741	5 04 27	5.0656	5 03 56	22
23	5.0970	5 05 49	5.0884	5 05 18	5.0799	5 04 48	5.0713	5 04 17	23
24	5.1028	5 06 10	5.0942	5 05 39	5.0857	5 05 09	5.0771	5 04 38	24
25	5.1086	5 06 31	5.1000	5 06 00	5.0914	5 05 29	5.0829	5 04 58	25
26	5.1144	5 06 52	5.1059	5 06 21	5.0973	5 05 50	5.0888	5 05 19	26
27	5.1203	5 07 13	5.1117	5 06 42	5.1031	5 06 11	5.0946	5 05 41	27
28	5.1261	5 07 34	5.1175	5 07 03	5.1089	5 06 32	5.1003	5 06 01	28
29	5.1320	5 07 55	5.1234	5 07 24	5.1148	5 06 53	5.1062	5 06 22	29
30	5.1380	5 08 17	5.1293	5 07 45	5.1207	5 07 15	5.1121	5 06 44	30
31	5.1439	5 08 38	5.1352	5 08 07	5.1266	5 07 36	5.1180	5 07 05	31
32	5.1498	5 08 59	5.1411	5 08 28	5.1325	5 07 57	5.1239	5 07 26	32
33	5.1557	5 09 21	5.1471	5 08 50	5.1384	5 08 18	5.1298	5 07 47	33
34	5.1617	5 09 42	5.1530	5 09 11	5.1443	5 08 39	5.1357	5 08 09	34
35	5.1677	5 10 04	5.1589	5 09 32	5.1502	5 09 01	5.1416	5 08 30	35
36	5.1737	5 10 25	5.1650	5 09 54	5.1563	5 09 23	5.1477	5 08 52	36
37	5.1796	5 10 47	5.1710	5 10 16	5.1622	5 09 44	5.1536	5 09 13	37
38	5.1856	5 11 08	5.1769	5 10 37	5.1682	5 10 06	5.1595	5 09 34	38
39	5.1917	5 11 30	5.1830	5 10 59	5.1742	5 10 27	5.1656	5 09 56	39
40	5.1977	5 11 52	6.1890	5 11 20	5.1802	5 10 49	5.1716	5 10 18	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$7^h\ 04^m\ 00^s$		$7^h\ 04^m\ 30^s$		$7^h\ 05^m\ 00^s$		$7^h\ 05^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	4.9388	4 56 19	4.9304	4 55 49	4.9221	4 55 20	4.9138	4 54 49	1
2	4.9443	4 56 39	4.9359	4 56 09	4.9276	4 55 39	4.9193	4 55 09	2
3	4.9498	4 56 59	4.9415	4 56 29	4.9331	4 55 58	4.9248	4 55 29	3
4	4.9553	4 57 19	4.9470	4 56 49	4.9386	4 56 19	4.9303	4 55 49	4
5	4.9608	4 57 39	4.9526	4 57 09	4.9441	4 56 39	4.9358	4 56 09	5
6	4.9664	4 57 59	4.9581	4 57 29	4.9496	4 56 59	4.9413	4 56 29	6
7	4.9720	4 58 19	4.9636	4 57 49	4.9552	4 57 19	4.9469	4 56 49	7
8	4.9776	4 58 39	4.9692	4 58 09	4.9608	4 57 39	4.9524	4 57 09	8
9	4.9831	4 58 59	4.9748	4 58 29	4.9663	4 57 59	4.9579	4 57 28	9
10	4.9887	4 59 19	4.9803	4 58 49	4.9719	4 58 19	4.9636	4 57 49	10
11	4.9943	4 59 39	4.9859	4 59 09	4.9775	4 58 39	4.9691	4 58 09	11
12	5.0000	5 00 00	4.9916	4 59 30	4.9831	4 58 59	4.9748	4 58 29	12
13	5.0057	5 00 20	4.9972	4 59 50	4.9887	4 59 19	4.9803	4 58 49	13
14	5.0113	5 00 41	5.0029	5 00 10	4.9944	4 59 40	4.9859	4 59 09	14
15	5.0170	5 01 01	5.0085	5 00 31	5.0000	5 00 00	4.9916	4 59 30	15
16	5.0226	5 01 21	5.0142	5 00 57	5.0057	5 00 21	4.9972	4 59 50	16
17	5.0283	5 01 42	5.0199	5 01 12	5.0113	5 00 41	5.0029	5 00 10	17
18	5.0339	5 02 02	5.0255	5 01 32	5.0170	5 01 01	5.0085	5 00 30	18
19	5.0396	5 02 23	5.0312	5 01 52	5.0226	5 01 21	5.0142	5 00 51	19
20	5.0454	5 02 43	5.0370	5 02 13	5.0284	5 01 42	5.0200	5 01 12	20
21	5.0512	5 03 04	5.0427	5 02 34	5.0341	5 02 03	5.0256	5 01 32	21
22	5.0570	5 03 25	5.0485	5 02 54	5.0399	5 02 24	5.0314	5 01 53	22
23	5.0627	5 03 46	5.0542	5 03 15	5.0456	5 02 44	5.0371	5 02 14	23
24	5.0685	5 04 06	5.0600	5 03 36	5.0514	5 03 05	5.0429	5 02 34	24
25	5.0742	5 04 27	5.0657	5 03 57	5.0571	5 03 26	5.0486	5 02 55	25
26	5.0801	5 04 48	5.0715	5 04 17	5.0629	5 03 46	5.0544	5 03 16	26
27	5.0859	5 05 09	5.0773	5 04 32	5.0687	5 04 07	5.0602	5 03 37	27
28	5.0917	5 05 30	5.0831	5 04 59	5.0744	5 04 28	5.0660	5 03 58	28
29	5.0975	5 05 51	5.0890	5 05 20	5.0803	5 04 49	5.0718	5 04 18	29
30	5.1034	5 06 12	5.0949	5 05 42	5.0861	5 05 10	5.0776	5 04 39	30
31	5.1093	5 06 33	5.1007	5 06 03	5.0920	5 05 31	5.0834	5 05 00	31
32	5.1152	5 06 55	5.1066	5 06 24	5.0979	5 05 52	5.0893	5 05 21	32
33	5.1211	5 07 16	5.1124	5 06 45	5.1038	5 06 13	5.0952	5 05 43	33
34	5.1270	5 07 37	5.1183	5 07 06	5.1096	5 06 35	5.1011	5 06 04	34
35	5.1329	5 07 58	5.1242	5 07 27	5.1155	5 06 56	5.1069	5 06 25	35
36	5.1389	5 08 20	5.1303	5 07 49	5.1216	5 07 18	5.1129	5 06 46	36
37	5.1448	5 08 41	5.1362	5 08 10	5.1274	5 07 39	5.1188	5 07 07	37
38	5.1507	5 09 03	5.1422	5 08 32	5.1333	5 08 00	5.1248	5 07 29	38
39	5.1568	5 09 24	5.1481	5 08 53	5.1393	5 08 21	5.1308	5 07 51	39
40	5.1628	5 09 46	5.1541	5 09 15	5.1452	5 08 43	5.1366	5 08 12	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$7^h\ 06^m\ 00^s$		$7^h\ 06^m\ 30^s$		$7^h\ 07^m\ 00^s$		$7^h\ 07^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	4.9054	4 54 19	4.8971	4 53 50	4.8888	4 53 19	4.8804	4 52 49	1
2	4.9109	4 54 39	4.9026	4 54 09	4.8943	4 53 39	4.8859	4 53 09	2
3	4.9164	4 54 59	4.9080	4 54 29	4.8997	4 53 59	4.8913	4 53 29	3
4	4.9219	4 55 19	4.9135	4 54 49	4.9051	4 54 18	4.8968	4 53 48	4
5	4.9274	4 55 39	4.9190	4 55 08	4.9107	4 54 39	4.9022	4 54 08	5
6	4.9329	4 55 58	4.9245	4 55 28	4.9162	4 54 58	4.9076	4 54 27	6
7	4.9384	4 56 18	4.9301	4 55 48	4.9217	4 55 18	4.9132	4 54 48	7
8	4.9440	4 56 38	4.9356	4 56 08	4.9272	4 55 38	4.9188	4 55 07	8
9	4.9494	4 56 58	4.9411	4 56 28	4.9327	4 55 58	4.9242	4 55 27	9
10	4.9551	4 57 18	4.9467	4 56 48	4.9382	4 56 18	4.9298	4 55 47	10
11	4.9607	4 57 39	4.9522	4 57 08	4.9437	4 56 37	4.9353	4 56 07	11
12	4.9662	4 57 59	4.9578	4 57 28	4.9493	4 56 57	4.9410	4 56 28	12
13	4.9719	4 58 19	4.9634	4 57 48	4.9549	4 57 17	4.9466	4 56 48	13
14	4.9775	4 58 39	4.9690	4 58 08	4.9605	4 57 38	4.9521	4 57 08	14
15	4.9831	4 58 59	4.9746	4 58 29	4.9662	4 57 58	4.9577	4 57 28	15
16	4.9887	4 59 19	4.9802	4 58 49	4.9717	4 58 18	4.9633	4 57 48	16
17	4.9943	4 59 39	4.9858	4 59 09	4.9773	4 58 38	4.9689	4 58 08	17
18	5.0000	5 00 00	4.9915	4 59 29	4.9830	4 58 59	4.9745	4 58 28	18
19	5.0058	5 00 21	4.9971	4 59 49	4.9886	4 59 19	4.9801	4 58 48	19
20	5.0114	5 00 41	5.0029	5 00 10	4.9943	4 59 39	4.9859	4 59 09	20
21	5.0171	5 01 02	5.0086	5 00 31	5.0000	5 00 00	4.9915	4 59 29	21
22	5.0229	5 01 22	5.0143	5 00 51	5.0057	5 00 21	4.9972	4 59 50	22
23	5.0285	5 01 42	5.0200	5 01 12	5.0114	5 00 41	5.0029	5 00 10	23
24	5.0343	5 02 03	5.0257	5 01 33	5.0171	5 01 01	5.0087	5 00 31	24
25	5.0400	5 02 24	5.0314	5 01 53	5.0228	5 01 22	5.0143	5 00 51	25
26	5.0458	5 02 45	5.0372	5 02 14	5.0286	5 01 43	5.0201	5 01 12	26
27	5.0516	5 03 06	5.0430	5 02 35	5.0344	5 02 04	5.0259	5 01 33	27
28	5.0573	5 03 26	5.0487	5 02 55	5.0401	5 02 24	5.0316	5 01 54	28
29	5.0631	5 03 47	5.0545	5 03 16	5.0459	5 02 45	5.0373	5 02 14	29
30	5.0690	5 04 08	5.0603	5 03 37	5.0517	5 03 06	5.0431	5 02 35	30
31	5.0748	5 04 29	5.0662	5 03 58	5.0575	5 03 27	5.0489	5 02 56	31
32	5.0807	5 04 51	5.0720	5 04 19	5.0634	5 03 48	5.0548	5 03 17	32
33	5.0865	5 05 11	5.0778	5 04 40	5.0692	5 04 09	5.0606	5 03 38	33
34	5.0924	5 05 33	5.0837	5 05 01	5.0750	5 04 30	5.0664	5 03 59	34
35	5.0982	5 05 54	5.0896	5 05 23	5.0809	5 04 51	5.0722	5 04 20	35
36	5.1042	5 06 15	5.0955	5 05 44	5.0869	5 05 13	5.0782	5 04 42	36
37	5.1101	5 06 36	5.1014	5 06 05	5.0927	5 05 34	5.0840	5 05 02	37
38	5.1160	5 06 58	5.1073	5 06 26	5.0986	5 05 55	5.0899	5 05 24	38
39	5.1220	5 07 19	5.1132	5 06 48	5.1045	5 06 16	5.0959	5 05 45	39
40	5.1279	5 07 40	5.1191	5 07 09	5.1104	5 06 37	5.1018	5 06 06	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$7^h\ 08^m\ 00^s$		$7^h\ 08^m\ 30^s$		$7^h\ 09^m\ 00^s$		$7^h\ 09^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	4.8720	4 52 09	4.8638	4 51 49	4.8553	4 51 19	4.8471	4 50 50	1
2	4.8774	4 52 29	4.8691	4 52 09	4.8608	4 51 39	4.8524	4 51 09	2
3	4.8829	4 52 48	4.8746	4 52 29	4.8662	4 51 58	4.8579	4 51 28	3
4	4.8883	4 53 08	4.8800	4 52 48	4.8716	4 52 18	4.8633	4 51 48	4
5	4.8938	4 53 28	4.8855	4 53 08	4.8771	4 52 38	4.8688	4 52 07	5
6	4.8993	4 53 47	4.8909	4 53 27	4.8824	4 52 57	4.8742	4 52 27	6
7	4.9047	4 54 17	4.8964	4 53 47	4.8880	4 53 17	4.8797	4 52 47	7
8	4.9103	4 54 37	4.9019	4 54 07	4.8935	4 53 37	4.8852	4 53 07	8
9	4.9158	4 54 57	4.9074	4 54 27	4.8989	4 53 57	4.8906	4 53 26	9
10	4.9213	4 55 16	4.9129	4 54 46	4.9044	4 54 16	4.8961	4 53 46	10
11	4.9268	4 55 36	4.9184	4 55 06	4.9099	4 54 36	4.9016	4 54 06	11
12	4.9324	4 55 56	4.9240	4 55 26	4.9155	4 54 56	4.9071	4 54 26	12
13	4.9379	4 56 16	4.9296	4 55 47	4.9211	4 55 16	4.9127	4 54 46	13
14	4.9435	4 56 36	4.9352	4 56 07	4.9267	4 55 36	4.9182	4 55 06	14
15	4.9491	4 56 56	4.9407	4 56 27	4.9322	4 55 56	4.9237	4 55 25	15
16	4.9547	4 57 16	4.9463	4 56 47	4.9377	4 56 16	4.9293	4 55 45	16
17	4.9603	4 57 37	4.9519	4 57 07	4.9433	4 56 36	4.9349	4 56 06	17
18	4.9659	4 57 57	4.9575	4 57 27	4.9489	4 56 56	4.9405	4 56 26	18
19	4.9715	4 58 17	4.9631	4 57 47	4.9545	4 57 16	4.9461	4 56 46	19
20	4.9772	4 58 38	4.9688	4 58 07	4.9602	4 57 37	4.9518	4 57 06	20
21	4.9829	4 58 58	4.9744	5 58 28	4.9659	4 57 57	4.9574	4 57 27	21
22	4.9886	4 59 19	4.9801	4 58 48	4.9715	4 58 17	4.9631	4 57 47	22
23	4.9943	4 59 39	4.9857	4 59 08	4.9771	4 58 38	4.9688	4 58 07	23
24	5.0000	5 00 00	4.9915	4 59 29	4.9829	4 58 58	4.9744	4 58 28	24
25	5.0057	5 00 21	4.9971	4 59 50	4.9885	4 59 18	4.9800	4 58 48	25
26	5.0114	5 00 41	5.0029	5 00 10	4.9943	4 59 39	4.9857	4 59 09	26
27	5.0172	5 01 02	5.0086	5 00 31	5.0000	5 00 00	4.9914	4 59 29	27
28	5.0229	5 01 22	5.0143	5 00 51	5.0057	5 00 21	4.9971	4 59 50	28
29	5.0286	5 01 43	5.0201	5 01 12	5.0114	5 00 41	5.0029	5 00 10	29
30	5.0344	5 02 04	5.0259	5 01 33	5.0172	5 01 02	5.0087	5 00 31	30
31	5.0403	5 02 25	5.0317	5 01 54	5.0229	5 01 22	5.0144	5 00 52	31
32	5.0461	5 02 46	5.0375	5 02 15	5.0287	5 01 43	5.0202	5 01 13	32
33	5.0519	5 03 07	5.0433	5 02 36	5.0345	5 02 04	5.0259	5 01 33	33
34	5.0577	5 03 28	5.0491	5 02 57	5.0404	5 02 25	5.0317	5 01 54	34
35	5.0635	5 03 49	5.0549	5 03 18	5.0462	5 02 46	5.0376	5 02 15	35
36	5.0694	5 04 10	5.0608	5 03 39	5.0521	5 03 08	5.0435	5 02 37	36
37	5.0753	5 04 31	5.0666	5 04 00	5.0579	5 03 28	5.0493	5 02 57	37
38	5.0811	5 04 52	5.0725	5 04 21	5.0638	5 03 49	5.0551	5 03 18	38
39	5.0871	5 05 14	5.0783	5 04 42	5.0697	5 04 11	5.0610	5 03 40	39
40	5.0930	5 05 35	5.0842	5 05 03	5.0755	5 04 32	5.0669	5 04 01	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$7^h\ 10^m\ 00^s$		$7^h\ 10^m\ 30^s$		$7^h\ 11^m\ 00^s$		$7^h\ 11^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	4.8387	4 50 19	4.8303	4 49 49	4.8220	4 49 19	4.8137	4 48 49	1
2	4.8441	4 50 39	4.8357	4 50 09	4.8273	4 49 38	4.8190	4 49 08	2
3	4.8495	4 50 58	4.8411	4 50 28	4.8328	4 49 58	4.8244	4 49 28	3
4	4.8549	4 51 18	4.8465	4 50 48	4.8381	4 50 17	4.8298	4 49 47	4
5	4.8603	4 51 37	4.8520	4 51 07	4.8437	4 50 36	4.8352	4 50 07	5
6	4.8658	4 51 57	4.8574	4 51 27	4.8490	4 50 56	4.8406	4 50 26	6
7	4.8712	4 52 16	4.8628	4 51 47	4.8545	4 51 16	4.8461	4 50 46	7
8	4.8768	4 52 36	4.8683	4 52 06	4.8599	4 51 35	4.8516	4 51 06	8
9	4.8821	4 52 56	4.8737	4 52 25	4.8653	4 51 55	4.8571	4 51 26	9
10	4.8877	4 53 16	4.8792	4 52 45	4.8708	4 52 14	4.8624	4 51 45	10
11	4.8931	4 53 35	4.8847	4 53 05	4.8763	4 52 34	4.8679	4 52 04	11
12	4.8987	4 53 55	4.8902	4 53 24	4.8818	4 52 54	4.8733	4 52 24	12
13	4.9042	4 54 15	4.8958	4 53 45	4.8873	4 53 14	4.8789	4 52 44	13
14	4.9098	4 54 35	4.9013	4 54 05	4.8928	4 53 34	4.8843	4 53 03	14
15	4.9153	4 54 55	4.9068	4 54 24	4.8983	4 53 54	4.8899	4 53 24	15
16	4.9209	4 55 15	4.9124	4 54 45	4.9039	4 54 14	4.8954	4 53 44	16
17	4.9264	4 55 35	4.9179	4 55 04	4.9094	4 54 34	4.9010	4 54 04	17
18	4.9320	4 55 55	4.9235	4 55 23	4.9149	4 54 54	4.9064	4 54 23	18
19	4.9376	4 56 15	4.9290	4 55 44	4.9205	4 55 14	4.9120	4 54 43	19
20	4.9432	4 56 36	4.9347	4 56 05	4.9262	4 55 34	4.9177	4 55 04	20
21	4.9488	4 56 55	4.9403	4 56 25	4.9318	4 55 54	4.9232	4 55 24	21
22	4.9545	4 57 16	4.9459	4 56 45	4.9375	4 56 15	4.9289	4 55 44	22
23	4.9601	4 57 36	4.9515	4 57 05	4.9430	4 56 35	4.9344	4 56 04	23
24	4.9658	4 57 57	4.9572	4 57 26	4.9487	4 56 55	4.9401	4 56 24	24
25	4.9714	4 58 17	4.9628	4 57 46	4.9543	4 57 15	4.9458	4 56 45	25
26	4.9771	4 58 38	4.9686	4 58 07	4.9600	4 57 36	4.9514	4 57 05	26
27	4.9829	4 58 58	4.9743	4 58 27	4.9657	4 57 55	4.9571	4 57 26	27
28	4.9885	4 59 19	4.9799	4 58 48	4.9713	4 58 17	4.9628	4 57 45	28
29	4.9942	4 59 39	4.9857	4 59 09	4.9770	4 58 37	4.9684	4 58 06	29
30	5.0000	5 00 00	4.9914	4 59 29	4.9828	4 58 58	4.9741	4 58 27	30
31	5.0057	5 00 21	4.9971	4 59 49	4.9885	4 59 19	4.9799	4 58 48	31
32	5.0115	5 00 41	5.0029	5 00 10	4.9943	4 59 39	4.9857	4 59 09	32
33	5.0173	5 01 02	5.0086	5 00 31	5.0000	5 00 00	4.9914	4 59 29	33
34	5.0230	5 01 23	5.0144	5 00 52	5.0057	5 00 21	4.9971	4 59 50	34
35	5.0289	5 01 44	5.0203	5 01 02	5.0115	5 00 41	5.0029	5 00 10	35
36	5.0348	5 02 05	5.0261	5 01 33	5.0174	5 01 03	5.0088	5 00 31	36
37	5.0406	5 02 25	5.0319	5 01 55	5.0232	5 01 24	5.0146	5 00 53	37
38	5.0464	5 02 46	5.0377	5 02 16	5.0290	5 01 44	5.0203	5 01 13	38
39	5.0523	5 03 08	5.0436	5 02 37	5.0349	5 02 06	5.0262	5 01 34	39
40	5.0581	5 03 30	5.0494	5 02 58	5.0407	5 02 27	5.0320	5 01 55	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$7^h\ 12^m\ 00^s$		$7^h\ 12^m\ 30^s$		$7^h\ 13^m\ 00^s$		$7^h\ 13^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	4.8053	4 48 19	4.7970	4 47 49	4.7887	4 47 19	4.7803	4 46 49	1
2	4.8106	4 48 38	4.8023	4 48 08	4.7939	4 47 38	4.7857	4 47 08	2
3	4.8160	4 48 58	4.8077	4 48 27	4.7995	4 47 57	4.7910	4 47 28	3
4	4.8214	4 49 17	4.8131	4 48 47	4.8046	4 48 16	4.7963	4 47 47	4
5	4.8268	4 49 36	4.8184	4 49 06	4.8101	4 48 36	4.8018	4 48 06	5
6	4.8321	4 49 56	4.8238	4 49 25	4.8153	4 48 55	4.8071	4 48 26	6
7	4.8376	4 50 16	4.8292	4 49 45	4.8208	4 49 14	4.8125	4 48 45	7
8	4.8430	4 50 35	4.8347	4 50 04	4.8202	4 49 34	4.8179	4 49 04	8
9	4.8484	4 50 54	4.8400	4 50 24	4.8316	4 49 53	4.8232	4 49 24	9
10	4.8539	4 51 14	4.8456	4 50 44	4.8370	4 50 13	4.8287	4 49 43	10
11	4.8594	4 51 34	4.8510	4 51 04	4.8425	4 50 33	4.8341	4 50 03	11
12	4.8649	4 51 54	4.8565	4 51 23	4.8479	4 50 52	4.8396	4 50 23	12
13	4.8703	4 52 13	4.8619	4 51 43	4.8535	4 51 12	4.8451	4 50 42	13
14	4.8759	4 52 33	4.8674	4 52 02	4.8589	4 51 32	4.8506	4 51 02	14
15	4.8814	4 52 53	4.8729	4 52 22	4.8644	4 51 52	4.8560	4 51 22	15
16	4.8868	4 53 12	4.8784	4 52 42	4.8699	4 52 11	4.8615	4 51 41	16
17	4.8923	4 53 32	4.8839	4 53 02	4.8754	4 52 31	4.8669	4 52 01	17
18	4.8979	4 53 52	4.8895	4 53 22	4.8808	4 52 51	4.8724	4 52 21	18
19	4.9034	4 54 12	4.8950	4 53 42	4.8864	4 53 11	4.8780	4 52 41	19
20	4.9091	4 54 33	4.9006	4 54 02	4.8920	4 53 31	4.8836	4 53 01	20
21	4.9147	4 54 53	4.9062	4 54 22	4.8976	4 53 51	4.8891	4 53 21	21
22	4.9203	4 55 13	4.9118	4 54 42	4.9032	4 54 11	4.8947	4 53 41	22
23	4.9258	4 55 33	4.9173	4 55 02	4.9087	4 54 31	4.9003	4 54 01	23
24	4.9315	4 55 53	4.9230	4 55 22	4.9143	4 54 51	4.9059	4 54 21	24
25	4.9371	4 56 14	4.9286	4 55 43	4.9199	4 55 11	4.9114	4 54 41	25
26	4.9428	4 56 34	4.9342	4 56 03	4.9256	4 55 32	4.9171	4 55 01	26
27	4.9485	4 56 55	4.9398	4 56 23	4.9312	4 55 52	4.9228	4 55 22	27
28	4.9541	4 57 15	4.9455	4 56 43	4.9367	4 56 12	4.9284	4 55 42	28
29	4.9597	4 57 35	4.9511	4 57 04	4.9426	4 56 33	4.9340	4 56 02	29
30	4.9654	4 57 56	4.9569	4 57 25	4.9482	4 56 54	4.9397	4 56 23	30
31	4.9712	4 58 16	4.9626	4 57 45	4.9539	4 57 14	4.9454	4 56 43	31
32	4.9769	4 58 37	4.9683	4 58 06	4.9596	4 57 34	4.9510	4 57 04	32
33	4.9827	4 58 58	4.9740	4 58 26	4.9653	4 57 55	4.9568	4 57 24	33
34	4.9883	4 59 18	4.9798	4 58 47	4.9711	4 58 16	4.9625	4 57 45	34
35	4.9941	4 59 39	4.9856	4 59 08	4.9768	4 58 36	4.9682	4 58 06	35
36	5.0000	5 00 00	4.9913	4 59 29	4.9827	4 58 57	4.9740	4 58 26	36
37	5.0058	5 00 21	4.9971	4 59 49	4.9884	4 59 18	4.9798	4 58 47	37
38	5.0115	5 00 41	5.0029	5 00 10	4.9942	4 59 39	4.9856	4 59 08	38
39	5.0174	5 01 03	5.0088	5 00 31	5.0000	5 00 00	4.9914	4 59 29	39
40	5.0232	5 01 24	5.0146	5 00 53	5.0058	5 00 21	4.9971	4 59 50	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$7^h\ 14^m\ 00^s$		$7^h\ 14^m\ 30^s$		$7^h\ 15^m\ 00^s$		$7^h\ 15^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	4.7720	4 46 19	4.7637	4 45 49	4.7553	4 45 19	4.7469	4 44 49	1
2	4.7773	4 46 38	4.7689	4 46 08	4.7606	4 45 38	4.7521	4 45 08	2
3	4.7826	4 46 57	4.7743	4 46 27	4.7659	4 45 57	4.7574	4 45 27	3
4	4.7880	4 47 17	4.7796	4 46 47	4.7713	4 46 17	4.7628	4 45 46	4
5	4.7934	4 47 36	4.7850	4 47 06	4.7766	4 46 36	4.7681	4 46 05	5
6	4.7987	4 47 55	4.7902	4 47 25	4.7819	4 46 55	4.7734	4 46 24	6
7	4.8041	4 48 15	4.7957	4 47 45	4.7873	4 47 14	4.7788	4 46 43	7
8	4.8095	4 48 34	4.8011	4 48 04	4.7927	4 47 34	4.7842	4 47 03	8
9	4.8149	4 48 54	4.8064	4 48 23	4.7980	4 47 53	4.7895	4 47 22	9
10	4.8202	4 49 13	4.8118	4 48 42	4.8034	4 48 12	4.7949	4 47 42	10
11	4.8257	4 49 33	4.8172	4 49 02	4.8088	4 48 32	4.8003	4 48 01	11
12	4.8312	4 49 52	4.8227	4 49 22	4.8142	4 48 51	4.8058	4 48 21	12
13	4.8366	4 50 12	4.8281	4 49 41	4.8197	4 49 11	4.8111	4 48 40	13
14	4.8421	4 50 32	4.8336	4 50 01	4.8251	4 49 30	4.8166	4 49 00	14
15	4.8476	4 50 51	4.8390	4 50 20	4.8306	4 49 50	4.8220	4 49 19	15
16	4.8530	4 51 11	4.8445	4 50 40	4.8360	4 50 10	4.8274	4 49 39	16
17	4.8584	4 51 30	4.8500	4 51 00	4.8415	4 50 29	4.8329	4 49 58	17
18	4.8639	4 51 50	4.8554	4 51 19	4.8469	4 50 49	4.8383	4 50 18	18
19	4.8694	4 52 10	4.8609	4 51 39	4.8524	4 51 09	4.8439	4 50 38	19
20	4.8751	4 52 30	4.8666	4 52 00	4.8580	4 51 29	4.8494	4 50 58	20
21	4.8806	4 52 50	4.8720	4 52 19	4.8636	4 51 49	4.8549	4 51 18	21
22	4.8862	4 53 10	4.8777	4 52 40	4.8691	4 52 09	4.8605	4 51 38	22
23	4.8917	4 53 30	4.8831	4 52 59	4.8746	4 52 29	4.8660	4 51 58	23
24	4.8974	4 53 50	4.8888	4 53 19	4.8802	4 52 49	4.8716	4 52 18	24
25	4.9029	4 54 10	4.8943	4 53 39	4.8857	4 53 09	4.8771	4 52 38	25
26	4.9085	4 54 31	4.8999	4 54 00	4.8913	4 53 29	4.8827	4 52 58	26
27	4.9142	4 54 51	4.9056	4 54 20	4.8970	4 53 49	4.8883	4 53 18	27
28	4.9197	4 55 11	4.9111	4 54 40	4.9026	4 54 09	4.8939	4 53 38	28
29	4.9254	4 55 21	4.9168	4 55 00	4.9081	4 54 29	4.8994	4 53 58	29
30	4.9310	4 55 52	4.9224	4 55 21	4.9138	4 54 49	4.9051	4 54 18	30
31	4.9367	4 56 12	4.9281	4 55 41	4.9195	4 55 10	4.9108	4 54 39	31
32	4.9424	4 56 33	4.9338	4 56 01	4.9251	4 55 30	4.9164	4 54 59	32
33	4.9481	4 56 53	4.9394	4 56 22	4.9308	4 55 51	4.9221	4 55 20	33
34	4.9538	4 57 14	4.9451	4 56 42	4.9365	4 56 11	4.9278	4 55 40	34
35	4.9595	4 57 34	4.9509	4 57 03	4.9422	4 56 32	4.9334	4 56 00	35
36	4.9653	4 57 55	4.9567	4 57 24	4.9480	4 56 53	4.9392	4 56 21	36
37	4.9710	4 58 16	4.9623	4 57 44	4.9537	4 57 13	4.9449	4 56 42	37
38	4.9768	4 58 37	4.9681	4 58 05	4.9594	4 57 34	4.9507	4 57 03	38
39	4.9826	4 58 57	4.9739	4 58 26	4.9652	4 57 55	4.9564	4 57 23	39
40	4.9883	4 59 18	4.9797	4 58 47	4.9710	4 58 16	4.9621	4 57 44	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$7^h\ 16^m\ 00^s$		$7^h\ 16^m\ 30^s$		$7^h\ 17^m\ 00^s$		$7^h\ 17^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	4·7385	4 44 18	4·7393	4 43 49	4·7219	4 43 19	4·7136	4 42 49	1
2	4·7439	4 44 38	4·7356	4 44 08	4·7271	4 43 38	4·7188	4 43 08	2
3	4·7492	4 44 57	4·7409	4 44 27	4·7325	4 43 57	4·7241	4 43 27	3
4	4·7544	4 45 16	4·7461	4 44 46	4·7377	4 44 16	4·7293	4 43 45	4
5	4·7598	4 45 35	4·7514	4 45 05	4·7431	4 44 35	4·7347	4 44 05	5
6	4·7651	4 45 54	4·7568	4 45 24	4·7483	4 44 54	4·7399	4 44 24	6
7	4·7704	4 46 13	4·7621	4 45 44	4·7537	4 45 13	4·7452	4 44 43	7
8	4·7758	4 46 33	4·7674	4 46 03	4·7590	4 45 32	4·7506	4 45 02	8
9	4·7812	4 46 52	4·7728	4 46 22	4·7643	4 45 51	4·7559	4 45 21	9
10	4·7866	4 47 12	4·7781	4 46 41	4·7697	4 46 11	4·7612	4 45 40	10
11	4·7920	4 47 31	4·7835	4 47 01	4·7751	4 46 30	4·7666	4 45 59	11
12	4·7974	4 47 51	4·7890	4 47 20	4·7805	4 46 50	4·7719	4 46 19	12
13	4·8027	4 48 10	4·7943	4 47 39	4·7859	4 47 09	4·7773	4 46 38	13
14	4·8082	4 48 29	4·7998	4 47 59	4·7912	4 47 28	4·7827	4 46 58	14
15	4·8136	4 48 49	4·8052	4 48 19	4·7966	4 47 48	4·7882	4 47 18	15
16	4·8191	4 49 09	4·8105	4 48 38	4·8021	4 48 07	4·7935	4 47 37	16
17	4·8244	4 49 28	4·8160	4 48 58	4·8075	4 48 27	4·7990	4 47 56	17
18	4·8299	4 49 48	4·8214	4 49 17	4·8129	4 48 46	4·8044	4 48 16	18
19	4·8353	4 50 07	4·8269	4 49 36	4·8183	4 49 06	4·8099	4 48 36	19
20	4·8409	4 50 27	4·8324	4 49 57	4·8239	4 49 26	4·8153	4 48 55	20
21	4·8464	4 50 47	4·8379	4 50 16	4·8293	4 49 45	4·8208	4 49 15	21
22	4·8520	4 51 07	4·8435	4 50 37	4·8349	4 50 06	4·8263	4 49 35	22
23	4·8575	4 51 27	4·8490	4 50 56	4·8403	4 50 25	4·8318	4 49 54	23
24	4·8630	4 51 47	4·8546	4 51 17	4·8460	4 50 46	4·8373	4 50 14	24
25	4·8686	4 52 07	4·8600	4 51 36	4·8514	4 51 05	4·8428	4 50 34	25
26	4·8742	4 52 27	4·8657	4 51 57	4·8570	4 51 25	4·8484	4 50 54	26
27	4·8798	4 52 47	4·8712	4 52 16	4·8626	4 51 45	4·8540	4 51 14	27
28	4·8853	4 53 07	4·8768	4 52 36	4·8681	4 52 05	4·8596	4 51 34	28
29	4·8909	4 53 27	4·8823	4 52 56	4·8737	4 52 25	4·8651	4 51 54	29
30	4·8966	4 53 48	4·8880	4 53 17	4·8793	4 52 45	4·8707	4 52 15	30
31	4·9022	4 54 08	4·8937	4 53 37	4·8849	4 53 06	4·8763	4 52 35	31
32	4·9078	4 54 28	4·8992	4 53 57	4·8906	4 53 26	4·8819	4 52 55	32
33	4·9135	4 54 49	4·9049	4 54 18	4·8962	4 53 46	4·8876	4 53 15	33
34	4·9191	4 55 09	4·9106	4 54 38	4·9018	4 54 06	4·8932	4 53 36	34
35	4·9248	4 55 29	4·9162	4 54 58	4·9075	4 54 27	4·8988	4 53 56	35
36	4·9306	4 55 50	4·9220	4 55 19	4·9132	4 54 47	4·9046	4 54 17	36
37	4·9363	4 56 11	4·9277	4 55 40	4·9189	4 55 08	4·9102	4 54 37	37
38	4·9419	4 56 31	4·9333	4 56 00	4·9246	4 55 29	4·9159	4 54 57	38
39	4·9477	4 56 52	4·9391	4 56 21	4·9303	4 55 49	4·9217	4 55 18	39
40	4·9534	4 57 12	4·9448	4 56 41	4·9360	4 56 10	4·9273	4 55 38	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$7^h\ 18^m\ 00^s$		$7^h\ 18^m\ 30^s$		$7^h\ 19^m\ 00^s$		$7^h\ 19^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	4·7052	4 42 19	4·6969	4 41 49	4·6886	4 41 19	4·6801	4 40 48	1
2	4·7104	4 42 37	4·7021	4 42 08	4·6937	4 41 37	4·6853	4 41 07	2
3	4·7158	4 42 57	4·7074	4 42 27	4·6990	4 41 56	4·6906	4 41 26	3
4	4·7210	4 43 16	4·7126	4 42 45	4·7042	4 42 15	4·6958	4 41 45	4
5	4·7263	4 43 35	4·7179	4 43 04	4·7095	4 42 34	4·7011	4 42 04	5
6	4·7315	4 43 53	4·7231	4 43 24	4·7147	4 42 53	4·7063	4 42 33	6
7	4·7369	4 44 13	4·7284	4 43 43	4·7200	4 43 12	4·7116	4 42 42	7
8	4·7422	4 44 32	4·7337	4 44 02	4·7253	4 43 31	4·7169	4 43 01	8
9	4·7474	4 44 51	4·7390	4 44 20	4·7306	4 43 50	4·7222	4 43 20	9
10	4·7528	4 45 10	4·7444	4 44 40	4·7360	4 44 10	4·7274	4 43 39	10
11	4·7582	4 45 30	4·7497	4 44 59	4·7413	4 44 29	4·7328	4 43 58	11
12	4·7635	4 45 49	4·7551	4 45 18	4·7467	4 44 48	4·7382	4 44 18	12
13	4·7689	4 46 08	4·7605	4 45 38	4·7520	4 45 07	4·7435	4 44 37	13
14	4·7743	4 46 27	4·7659	4 45 57	4·7574	4 45 27	4·7489	4 44 56	14
15	4·7797	4 46 48	4·7712	4 46 16	4·7628	4 45 16	4·7542	4 45 15	15
16	4·7851	4 47 06	4·7766	4 46 36	4·7681	4 46 05	4·7596	4 45 35	16
17	4·7905	4 47 25	4·7820	4 46 55	4·7735	4 46 25	4·7650	4 45 54	17
18	4·7959	4 47 45	4·7874	4 47 15	4·7789	4 46 44	4·7704	4 46 13	18
19	4·8013	4 48 05	4·7928	4 47 34	4·7863	4 47 03	4·7758	4 46 33	19
20	4·8069	4 48 25	4·7983	4 47 54	4·7898	4 47 23	4·7812	4 46 52	20
21	4·8122	4 48 44	4·8038	4 48 13	4·7952	4 47 43	4·7867	4 47 12	21
22	4·8178	4 49 04	4·8092	4 48 33	4·8007	4 48 03	4·7922	4 47 32	22
23	4·8232	4 49 24	4·8147	4 48 53	4·8062	4 48 22	4·7976	4 47 51	23
24	4·8288	4 49 44	4·8202	4 49 13	4·8117	4 48 42	4·8031	4 48 11	24
25	4·8342	4 50 03	4·8257	4 49 33	4·8172	4 49 02	4·8085	4 48 31	25
26	4·8398	4 50 23	4·8312	4 49 52	4·8227	4 49 22	4·8141	4 48 51	26
27	4·8454	4 50 43	4·8367	4 50 12	4·8282	4 49 41	4·8196	4 49 11	27
28	4·8509	4 51 03	4·8423	4 50 32	4·8337	4 50 01	4·8251	4 49 30	28
29	4·8565	4 51 23	4·8479	4 50 52	4·8392	4 50 21	4·8306	4 49 50	29
30	4·8621	4 51 44	4·8534	4 51 12	4·8449	4 50 42	4·8361	4 50 10	30
31	4·8677	4 52 04	4·8590	4 51 32	4·8505	4 51 02	4·8418	4 50 30	31
32	4·8732	4 52 24	4·8646	4 51 53	4·8560	4 51 22	4·8473	4 50 50	32
33	4·8789	4 52 44	4·8702	4 52 13	4·8616	4 51 42	4·8529	4 51 10	33
34	4·8845	4 53 04	4·8759	4 52 33	4·8672	4 52 02	4·8585	4 51 31	34
35	4·8901	4 53 24	4·8815	4 52 53	4·8729	4 52 22	4·8641	4 51 51	35
36	4·8959	4 53 45	4·8872	4 53 14	4·8786	4 52 43	4·8698	4 52 11	36
37	4·9016	4 54 06	4·8928	4 53 34	4·8842	4 53 03	4·8754	4 52 31	37
38	4·9072	4 54 26	4·8985	4 53 55	4·8898	4 53 23	4·8810	4 52 52	38
39	4·9129	4 54 46	4·9042	4 54 15	4·8955	4 53 44	4·8867	4 53 12	39
40	4·9186	4 55 07	4·9099	4 54 36	4·9012	4 54 04	4·8923	4 53 32	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	7h 20m 00s		7h 20m 30s		7h 21m 00s		7h 21m 30s		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	4.6719	4 40 19	4.6634	4 39 48	4.6552	4 39 19	4.6468	4 38 48	1
2	4.6770	4 40 37	4.6686	4 40 07	4.6604	4 39 37	4.6520	4 39 07	2
3	4.6823	4 40 56	4.6739	4 40 26	4.6656	4 39 56	4.6571	4 39 26	3
4	4.6875	4 41 15	4.6791	4 40 45	4.6708	4 40 15	4.6623	4 39 44	4
5	4.6928	4 41 34	4.6843	4 41 03	4.6760	4 40 33	4.6676	4 40 03	5
6	4.6980	4 41 53	4.6896	4 41 23	4.6812	4 40 52	4.6729	4 40 22	6
7	4.7033	4 42 12	4.6949	4 41 42	4.6865	4 41 11	4.6781	4 40 41	7
8	4.7086	4 42 31	4.7001	4 42 00	4.6918	4 41 30	4.6834	4 41 00	8
9	4.7138	4 42 49	4.7053	4 42 19	4.6970	4 41 49	4.6886	4 41 19	9
10	4.7191	4 43 09	4.7107	4 42 39	4.7023	4 42 08	4.6938	4 41 37	10
11	4.7244	4 43 27	4.7160	4 42 58	4.7076	4 42 27	4.6991	4 41 57	11
12	4.7297	4 43 46	4.7213	4 43 17	4.7129	4 42 46	4.7045	4 42 16	12
13	4.7351	4 44 06	4.7266	4 43 36	4.7183	4 43 05	4.7097	4 42 35	13
14	4.7405	4 44 26	4.7319	4 43 55	4.7236	4 43 25	4.7151	4 42 54	14
15	4.7458	4 44 45	4.7373	4 44 14	4.7289	4 43 44	4.7204	4 43 13	15
16	4.7511	4 45 04	4.7427	4 44 34	4.7342	4 44 03	4.7257	4 43 33	16
17	4.7565	4 45 23	4.7480	4 44 53	4.7396	4 44 23	4.7311	4 43 52	17
18	4.7619	4 45 43	4.7533	4 45 12	4.7450	4 44 42	4.7364	4 44 11	18
19	4.7672	4 46 02	4.7588	4 45 32	4.7503	4 45 01	4.7418	4 44 30	19
20	4.7728	4 46 22	4.7642	4 45 51	4.7558	4 45 21	4.7471	4 44 50	20
21	4.7782	4 46 42	4.7696	4 46 11	4.7611	4 45 40	4.7525	4 45 09	21
22	4.7836	4 47 02	4.7751	4 46 30	4.7666	4 46 00	4.7580	4 45 29	22
23	4.7891	4 47 21	4.7805	4 46 50	4.7720	4 46 19	4.7634	4 45 48	23
24	4.7946	4 47 41	4.7860	4 47 10	4.7775	4 46 39	4.7689	4 46 08	24
25	4.8000	4 48 00	4.7913	4 47 29	4.7829	4 46 59	4.7743	4 46 28	25
26	4.8056	4 48 20	4.7969	4 47 49	4.7884	4 47 18	4.7798	4 46 47	26
27	4.8110	4 48 40	4.8024	4 48 09	4.7939	4 47 38	4.7853	4 47 07	27
28	4.8165	4 49 00	4.8078	4 48 28	4.7993	4 47 58	4.7907	4 47 27	28
29	4.8220	4 49 19	4.8133	4 48 48	4.8049	4 48 18	4.7962	4 47 46	29
30	4.8276	4 49 39	4.8189	4 49 08	4.8103	4 48 37	4.8017	4 48 06	30
31	4.8331	4 49 59	4.8245	4 49 28	4.8160	4 48 57	4.8073	4 48 26	31
32	4.8387	4 50 19	4.8300	4 49 48	4.8215	4 49 17	4.8128	4 48 46	32
33	4.8443	4 50 39	4.8356	4 50 08	4.8270	4 49 37	4.8183	4 49 06	33
34	4.8499	4 51 00	4.8411	4 50 28	4.8326	4 49 57	4.8239	4 49 26	34
35	4.8554	4 51 19	4.8467	4 50 48	4.8381	4 50 17	4.8295	4 49 46	35
36	4.8611	4 51 40	4.8524	4 51 09	4.8439	4 50 38	4.8350	4 50 06	36
37	4.8668	4 52 00	4.8580	4 51 29	4.8494	4 50 58	4.8405	4 50 26	37
38	4.8724	4 52 21	4.8637	4 51 49	4.8550	4 51 18	4.8462	4 50 46	38
39	4.8781	4 52 41	4.8693	4 52 09	4.8607	4 51 39	4.8519	4 51 07	39
40	4.8837	4 53 01	4.8750	4 52 30	4.8663	4 51 59	4.8574	4 51 27	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$7^h\ 22^m\ 00^s$		$7^h\ 22^m\ 30^s$		$7^h\ 23^m\ 00^s$		$7^h\ 23^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	4. 6386	4 38 19	4. 6301	4 37 48	4. 6218	4 37 18	4. 6133	4 36 48	1
2	4. 6437	4 38 37	4. 6352	4 38 07	4. 6269	4 37 37	4. 6185	4 37 06	2
3	4. 6489	4 38 56	4. 6404	4 38 25	4. 6321	4 37 56	4. 6237	4 37 25	3
4	4. 6540	4 39 14	4. 6456	4 38 44	4. 6372	4 38 14	4. 6288	4 37 43	4
5	4. 6593	4 39 33	4. 6508	4 39 03	4. 6424	4 38 33	4. 6340	4 38 02	5
6	4. 6645	4 39 52	4. 6560	4 39 22	4. 6476	4 38 51	4. 6392	4 38 21	6
7	4. 6697	4 40 11	4. 6612	4 39 40	4. 6529	4 39 10	4. 6444	4 38 40	7
8	4. 6750	4 40 30	4. 6665	4 39 59	4. 6581	4 39 29	4. 6497	4 38 59	8
9	4. 6801	4 40 48	4. 6717	4 40 18	4. 6632	4 39 48	4. 6548	4 39 17	9
10	4. 6854	4 41 07	4. 6769	4 40 37	4. 6685	4 40 06	4. 6600	4 39 36	10
11	4. 6907	4 41 27	4. 6822	4 40 56	4. 6738	4 40 25	4. 6653	4 39 55	11
12	4. 6960	4 41 46	4. 6875	4 41 15	4. 6791	4 40 45	4. 6706	4 40 14	12
13	4. 7013	4 42 05	4. 6928	4 41 34	4. 6843	4 41 03	4. 6759	4 40 33	13
14	4. 7066	4 42 24	4. 6981	4 41 53	4. 6897	4 41 23	4. 6811	4 40 52	14
15	4. 7119	4 42 43	4. 7034	4 42 12	4. 6949	4 41 42	4. 6864	4 41 11	15
16	4. 7173	4 43 02	4. 7087	4 42 31	4. 7002	4 42 01	4. 6917	4 41 30	16
17	4. 7226	4 43 21	4. 7140	4 42 50	4. 7056	4 42 20	4. 6970	4 41 49	17
18	4. 7279	4 43 40	4. 7193	4 43 09	4. 7109	4 42 39	4. 7023	4 42 08	18
19	4. 7332	4 44 00	4. 7247	4 43 29	4. 7162	4 42 59	4. 7076	4 42 27	19
20	4. 7387	4 44 19	4. 7301	4 43 48	4. 7216	4 43 18	4. 7130	4 42 47	20
21	4. 7441	4 44 39	4. 7354	4 44 07	4. 7269	4 43 37	4. 7183	4 43 06	21
22	4. 7495	4 44 58	4. 7409	4 44 27	4. 7324	4 43 57	4. 7238	4 43 25	22
23	4. 7549	4 45 18	4. 7462	4 44 46	4. 7377	4 44 16	4. 7291	4 43 45	23
24	4. 7604	4 45 37	4. 7517	4 45 06	4. 7432	4 44 36	4. 7346	4 44 05	24
25	4. 7658	4 45 57	4. 7571	4 45 26	4. 7486	4 44 55	4. 7399	4 44 24	25
26	4. 7713	4 46 17	4. 7626	4 45 45	4. 7540	4 45 14	4. 7453	4 44 43	26
27	4. 7767	4 46 36	4. 7680	4 46 05	4. 7594	4 45 34	4. 7508	4 45 03	27
28	4. 7821	4 46 56	4. 7735	4 46 25	4. 7649	4 45 54	4. 7562	4 45 22	28
29	4. 7876	4 47 15	4. 7789	4 46 43	4. 7703	4 46 13	4. 7617	4 45 42	29
30	4. 7931	4 47 35	4. 7844	4 47 04	4. 7759	4 46 33	4. 7671	4 46 02	30
31	4. 7986	4 47 55	4. 7899	4 47 24	4. 7813	4 46 53	4. 7727	4 46 22	31
32	4. 8042	4 48 15	4. 7955	4 47 44	4. 7869	4 47 13	4. 7781	4 46 41	32
33	4. 8098	4 48 35	4. 8010	4 48 04	4. 7923	4 47 32	4. 7837	4 47 01	33
34	4. 8152	4 48 55	4. 8065	4 48 23	4. 7979	4 47 52	4. 7892	4 47 21	34
35	4. 8208	4 49 15	4. 8120	4 48 43	4. 8034	4 48 12	4. 7947	4 47 41	35
36	4. 8264	4 49 35	4. 8177	4 49 04	4. 8091	4 48 33	4. 8003	4 48 01	36
37	4. 8320	4 49 55	4. 8232	4 49 24	4. 8146	4 48 53	4. 8059	4 48 21	37
38	4. 8376	4 50 15	4. 8288	4 49 43	4. 8201	4 49 12	4. 8113	4 48 41	38
39	4. 8433	4 50 36	4. 8345	4 50 04	4. 8258	4 49 33	4. 8170	4 49 01	39
40	4. 8489	4 50 56	4. 8400	4 50 24	4. 8313	4 49 53	4. 8226	4 49 21	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$7^h\ 24^m\ 00^s$		$7^h\ 24^m\ 30^s$		$7^h\ 25^m\ 00^s$		$7^h\ 25^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	4.6051	4 36 18	4.5968	4 35 48	4.5884	4 35 18	4.5800	4 34 48	1
2	4.6102	4 36 37	4.6018	4 36 07	4.5935	4 35 37	4.5851	4 35 06	2
3	4.6154	4 36 55	4.6070	4 36 25	4.5986	4 35 55	4.5903	4 35 25	3
4	4.6205	4 37 14	4.6121	4 36 44	4.6037	4 36 13	4.5953	4 35 43	4
5	4.6257	4 37 33	4.6173	4 37 02	4.6089	4 36 32	4.6005	4 36 02	5
6	4.6308	4 37 51	4.6225	4 37 21	4.6140	4 36 50	4.6057	4 36 21	6
7	4.6361	4 38 10	4.6276	4 37 39	4.6192	4 37 09	4.6108	4 36 39	7
8	4.6413	4 38 29	4.6328	4 37 58	4.6244	4 37 28	4.6160	4 36 58	8
9	4.6464	4 38 47	4.6380	4 38 17	4.6296	4 37 47	4.6211	4 37 16	9
10	4.6517	4 39 06	4.6432	4 38 36	4.6348	4 38 05	4.6263	4 37 35	10
11	4.6569	4 39 25	4.6484	4 38 54	4.6400	4 38 24	4.6316	4 37 54	11
12	4.6622	4 39 44	4.6537	4 39 13	4.6453	4 38 43	4.6368	4 38 12	12
13	4.6674	4 40 03	4.6589	4 39 32	4.6505	4 39 02	4.6420	4 38 31	13
14	4.6727	4 40 22	4.6642	4 39 51	4.6558	4 39 21	4.6473	4 38 50	14
15	4.6780	4 40 41	4.6695	4 40 10	4.6610	4 39 40	4.6525	4 39 09	15
16	4.6832	4 41 00	4.6748	4 40 29	4.6663	4 39 59	4.6578	4 39 28	16
17	4.6886	4 41 19	4.6801	4 40 48	4.6715	4 40 17	4.6630	4 39 47	17
18	4.6939	4 41 38	4.6853	4 41 07	4.6768	4 40 36	4.6683	4 40 06	18
19	4.6992	4 41 57	4.6907	4 41 27	4.6821	4 40 56	4.6735	4 40 25	19
20	4.7046	4 42 17	4.6960	4 41 46	4.6875	4 41 15	4.6790	4 40 44	20
21	4.7099	4 42 36	4.7013	4 42 05	4.6928	4 41 34	4.6842	4 41 03	21
22	4.7153	4 42 55	4.7067	4 42 24	4.6981	4 41 53	4.6897	4 41 23	22
23	4.7207	4 43 15	4.7121	4 42 44	4.7035	4 42 13	4.6949	4 41 42	23
24	4.7261	4 43 34	4.7175	4 43 03	4.7089	4 42 31	4.7003	4 42 01	24
25	4.7314	4 43 53	4.7228	4 43 22	4.7143	4 42 51	4.7057	4 42 21	25
26	4.7369	4 44 13	4.7282	4 43 42	4.7197	4 43 11	4.7111	4 42 40	26
27	4.7423	4 44 32	4.7337	4 44 01	4.7251	4 43 30	4.7165	4 42 59	27
28	4.7477	4 44 52	4.7390	4 44 20	4.7304	4 43 49	4.7218	4 43 18	28
29	4.7531	4 45 11	4.7445	4 44 40	4.7359	4 44 09	4.7272	4 43 38	29
30	4.7586	4 45 31	4.7500	4 45 00	4.7413	4 44 29	4.7327	4 43 58	30
31	4.7641	4 45 51	4.7554	4 45 19	4.7468	4 44 48	4.7381	4 44 17	31
32	4.7696	4 46 11	4.7609	4 45 39	4.7522	4 45 08	4.7437	4 44 37	32
33	4.7751	4 46 30	4.7664	4 45 59	4.7578	4 45 28	4.7491	4 44 57	33
34	4.7806	4 46 50	4.7719	4 46 19	4.7632	4 45 47	4.7546	4 45 17	34
35	4.7861	4 47 10	4.7774	4 46 39	4.7687	4 46 07	4.7600	4 45 36	35
36	4.7917	4 47 30	4.7830	4 46 59	4.7743	4 46 27	4.7657	4 45 57	36
37	4.7973	4 47 50	4.7885	4 47 19	4.7798	4 46 47	4.7710	4 46 16	37
38	4.8028	4 48 10	4.7940	4 47 38	4.7853	4 47 07	4.7766	4 46 36	38
39	4.8084	4 48 30	4.7997	4 47 59	4.7909	4 47 27	4.7822	4 46 56	39
40	4.8139	4 48 50	4.8052	4 48 19	4.7964	4 47 47	4.7878	4 47 16	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$7^h\ 26^m\ 00^s$		$7^h\ 26^m\ 30^s$		$7^h\ 27^m\ 00^s$		$7^h\ 27^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	4.5717	4 34 18	4.5634	4 33 48	4.5550	4 33 18	4.5467	4 32 48	1
2	4.5768	4 34 36	4.5685	4 34 06	4.5601	4 33 36	4.5518	4 33 07	2
3	4.5819	4 34 55	4.5736	4 34 25	4.5652	4 33 55	4.5569	4 33 25	3
4	4.5870	4 35 13	4.5787	4 34 43	4.5703	4 34 13	4.5619	4 33 43	4
5	4.5922	4 35 31	4.5839	4 35 02	4.5755	4 34 32	4.5671	4 34 02	5
6	4.5973	4 35 50	4.5890	4 35 20	4.5805	4 34 50	4.5722	4 34 20	6
7	4.6025	4 36 09	4.5941	4 35 39	4.5856	4 35 08	4.5773	4 34 38	7
8	4.6077	4 36 28	4.5993	4 35 57	4.5908	4 35 27	4.5824	4 34 57	8
9	4.6128	4 36 46	4.6043	4 36 15	4.5959	4 35 45	4.5875	4 35 15	9
10	4.6180	4 37 05	4.6095	4 36 34	4.6011	4 36 04	4.5926	4 35 33	10
11	4.6232	4 37 24	4.6148	4 36 53	4.6063	4 36 23	4.5978	4 35 52	11
12	4.6284	4 37 42	4.6200	4 37 12	4.6114	4 36 41	4.6031	4 36 11	12
13	4.6336	4 38 01	4.6252	4 37 31	4.6167	4 37 00	4.6083	4 36 30	13
14	4.6389	4 38 20	4.6304	4 37 49	4.6219	4 37 19	4.6135	4 36 49	14
15	4.6441	4 38 39	4.6356	4 38 08	4.6271	4 31 38	4.6187	4 37 07	15
16	4.6493	4 38 57	4.6409	4 38 27	4.6323	4 37 56	4.6239	4 37 25	16
17	4.6546	4 39 17	4.6461	4 38 46	4.6375	4 38 15	4.6291	4 37 45	17
18	4.6598	4 39 35	4.6513	4 39 05	4.6428	4 38 34	4.6344	4 38 04	18
19	4.6651	4 39 54	4.6567	4 39 24	4.6481	4 38 53	4.6396	4 38 23	19
20	4.6704	4 40 13	4.6620	4 39 43	4.6534	4 39 12	4.6448	4 38 41	20
21	4.6758	4 40 33	4.6672	4 40 02	4.6587	4 39 31	4.6501	4 39 00	21
22	4.6811	4 40 52	4.6726	4 40 21	4.6640	4 39 50	4.6554	4 39 19	22
23	4.6864	4 41 11	4.6779	4 40 40	4.6693	4 40 09	4.6607	4 39 39	23
24	4.6918	4 41 30	4.6832	4 41 00	4.6747	4 40 29	4.6661	4 39 58	24
25	4.6972	4 41 50	4.6886	4 41 19	4.6800	4 40 48	4.6714	4 40 17	25
26	4.7025	4 42 09	4.6939	4 41 38	4.6853	4 41 07	4.6768	4 40 36	26
27	4.7079	4 42 28	4.6993	4 41 57	4.6907	4 41 27	4.6821	4 40 56	27
28	4.7132	4 42 48	4.7047	4 42 17	4.6960	4 41 46	4.6875	4 41 15	28
29	4.7187	4 43 07	4.7101	4 42 36	4.7014	4 42 05	4.6928	4 41 34	29
30	4.7241	4 43 27	4.7156	4 42 56	4.7069	4 42 25	4.6982	4 41 54	30
31	4.7295	4 43 46	4.7210	4 43 16	4.7123	4 42 44	4.7037	4 42 13	31
32	4.7350	4 44 06	4.7264	4 43 35	4.7177	4 43 04	4.7092	4 42 33	32
33	4.7405	4 44 26	4.7318	4 43 54	4.7232	4 43 24	4.7146	4 42 53	33
34	4.7459	4 44 45	4.7373	4 44 14	4.7286	4 43 43	4.7200	4 43 12	34
35	4.7513	4 45 05	4.7428	4 44 34	4.7341	4 44 03	4.7253	4 43 31	35
36	4.7570	4 45 25	4.7483	4 44 54	4.7396	4 44 23	4.7309	4 43 51	36
37	4.7624	4 45 45	4.7538	4 45 14	4.7451	4 44 42	4.7364	4 44 11	37
38	4.7679	4 46 04	4.7593	4 45 33	4.7506	4 45 02	4.7419	4 44 31	38
39	4.7735	4 46 25	4.7648	4 45 53	4.7561	4 45 22	4.7474	4 44 51	39
40	4.7790	4 46 44	4.7703	4 46 13	4.7616	4 45 42	4.7528	4 45 10	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$7^h\ 28^m\ 00^s$		$7^h\ 28^m\ 30^s$		$7^h\ 29^m\ 00^s$		$7^h\ 29^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
'	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	'
1	4. 5384	4 32 18	4. 5300	4 31 48	4. 5217	4 31 18	4 5133	4 30 48	1
2	4. 5434	4 32 36	4. 5351	4 32 06	4. 5267	4 31 36	4. 5183	4 31 06	2
3	4. 5485	4 32 55	4. 5402	4 32 25	4. 5318	4 31 54	4. 5234	4 31 24	3
4	4. 5536	4 33 13	4. 5452	4 32 43	4. 5368	4 32 12	4, 5285	4 31 43	4
5	4. 5587	4 33 31	4. 5503	4 33 01	4. 5420	4 32 31	4. 5335	4 32 01	5
6	4. 5637	4 33 49	4. 5554	4 33 19	4. 5470	4 32 49	4. 5386	4 32 19	6
7	4. 5689	4 34 08	4. 5605	4 33 37	4. 5521	4 33 08	4. 5437	4 32 37	7
8	4. 5740	4 34 26	4. 5656	4 33 56	4. 5572	4 33 26	4. 5488	4 32 55	8
9	4. 5791	4 34 44	4. 5706	4 34 14	4. 5622	4 33 44	4. 5538	4 33 13	9
10	4. 5843	4 35 03	4. 5758	4 34 33	4. 5674	4 34 03	4. 5590	4 33 32	10
11	4. 5894	4 35 21	4. 5810	4 34 51	4. 5726	4 34 21	4. 5641	4 33 51	11
12	4. 5947	4 35 41	4. 5862	4 35 10	4. 5777	4 34 40	4. 5693	4 34 09	12
13	4. 5998	4 35 59	4. 5914	4 35 28	4. 5829	4 34 58	4. 5745	4 34 28	13
14	4. 6050	4 36 18	4. 5966	4 35 47	4. 5880	4 35 17	4. 5796	4 34 46	14
15	4. 6102	4 36 37	4. 6017	4 36 06	4. 5932	4 35 36	4. 5848	4 35 05	15
16	4. 6154	4 36 56	4. 6069	4 36 25	4. 5984	4 35 54	4. 5899	4 35 24	16
17	4. 6206	4 37 13	4. 6122	4 36 44	4. 6036	4 36 13	4. 5951	4 35 42	17
18	4. 6258	4 37 33	4. 6173	4 37 02	4. 6088	4 36 32	4. 6003	4 36 01	18
19	4. 6310	4 37 51	4. 6226	4 37 21	4. 6140	4 36 50	4. 6055	4 36 19	19
20	4. 6364	4 38 11	4. 6279	4 37 40	4. 6193	4 37 09	4. 6108	4 36 39	20
21	4. 6416	4 38 30	4. 6331	4 37 59	4. 6246	4 37 29	4. 6161	4 36 58	21
22	4. 6470	4 38 49	4. 6384	4 38 18	4. 6299	4 37 48	4. 6213	4 37 17	22
23	4. 6522	4 39 07	4. 6437	4 38 37	4. 6351	4 38 06	4. 6266	4 37 36	23
24	4. 6576	4 39 27	4. 6490	4 38 56	4. 6404	4 38 25	4. 6319	4 37 55	24
25	4. 6628	4 39 46	4. 6542	4 39 15	4. 6457	4 38 44	4. 6372	4 38 14	25
26	4. 6682	4 40 05	4. 6596	4 39 35	4. 6511	4 39 04	4. 6425	4 38 33	26
27	4. 6735	4 40 25	4. 6650	4 39 54	4. 6564	4 39 23	4. 6478	4 38 52	27
28	4. 6789	4 40 44	4. 6702	4 40 13	4. 6618	4 39 42	4. 6531	4 39 11	28
29	4. 6842	4 41 03	4. 6757	4 40 33	4. 6671	4 40 01	4. 6585	4 39 31	29
30	4. 6897	4 41 23	4. 6810	4 40 52	4. 6724	4 40 21	4. 6638	4 39 49	30
31	4. 6950	4 41 42	4. 6864	4 41 11	4. 6778	4 40 40	4. 6692	4 40 09	31
32	4. 7004	4 42 01	4. 6918	4 41 30	4. 6831	4 40 59	4. 6745	4 40 28	32
33	4. 7058	4 42 21	4. 6972	4 41 50	4. 6886	4 41 19	4. 6799	4 40 48	33
34	4. 7113	4 42 41	4. 7026	4 42 09	4. 6939	4 41 38	4. 6853	4 41 07	34
35	4. 7167	4 43 01	4. 7080	4 42 29	4. 6993	4 41 58	4. 6908	4 41 27	35
36	4. 7223	4 43 20	4. 7135	4 42 49	4. 7049	4 42 18	4. 6962	4 41 46	36
37	4. 7277	4 43 40	4. 7190	4 43 08	4. 7104	4 42 37	4. 7017	4 42 06	37
38	4. 7331	4 44 00	4. 7244	4 43 28	4. 7158	4 42 57	4. 7071	4 42 26	38
39	4. 7387	4 44 19	4. 7300	4 43 48	4. 7213	4 43 16	4. 7125	4 42 45	39
40	4. 7442	4 44 39	4. 7354	4 44 07	4. 7267	4 43 36	4. 7180	4 43 05	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$7^h\ 30^m\ 00^s$		$7^h\ 30^m\ 30^s$		$7^h\ 31^m\ 00^s$		$7^h\ 31^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	4. 5051	4 30 18	4. 4967	4 29 48	4. 4883	4 29 18	4. 4801	4 28 48	1
2	4. 5100	4 30 36	4. 5016	4 30 06	4. 4933	4 29 36	4. 4850	4 29 06	2
3	4. 5151	4 30 54	4. 5068	4 30 24	4. 4983	4 29 54	4. 4900	4 29 24	3
4	4. 5201	4 31 12	4. 5117	4 30 42	4. 5032	4 30 12	4. 4950	4 29 42	4
5	4. 5252	4 31 31	4. 5168	4 31 00	4. 5084	4 30 30	4. 5000	4 30 00	5
6	4. 5302	4 31 49	4. 5217	4 31 18	4. 5133	4 30 48	4. 5050	4 30 18	6
7	4. 5354	4 32 07	4. 5269	4 31 37	4. 5184	4 31 06	4. 5101	4 30 36	7
8	4. 5404	4 32 25	4. 5320	4 31 55	4. 5235	4 31 25	4. 5152	4 30 55	8
9	4. 5455	4 32 44	4. 5371	4 32 14	4. 5286	4 31 43	4. 5202	4 31 13	9
10	4. 5506	4 33 02	4. 5421	4 32 32	4. 5337	4 32 01	4. 5253	4 31 31	10
11	4. 5557	4 33 21	4. 5423	4 32 50	4. 5388	4 32 20	4. 5304	4 31 40	11
12	4. 5609	4 33 39	4. 5524	4 33 09	4. 5439	4 32 38	4. 5355	4 32 08	12
13	4. 5660	4 33 58	4. 5575	4 33 27	4. 5490	4 32 56	4. 5407	4 32 27	13
14	4. 5712	4 34 16	4. 5627	4 33 45	4. 5542	4 33 15	4. 5458	4 32 45	14
15	4. 5764	4 34 35	4. 5678	4 34 04	4. 5593	4 33 33	4. 5509	4 33 03	15
16	4. 5815	4 34 53	4. 5730	4 34 23	4. 5645	4 33 52	4. 5561	4 33 22	16
17	4. 5867	4 35 12	4. 5782	4 34 42	4. 5697	4 34 11	4. 5612	4 33 40	17
18	4. 5919	4 35 31	4. 5833	4 35 00	4. 5747	4 34 29	4. 5664	4 33 59	18
19	4. 5990	4 35 49	4. 5885	4 35 18	4. 5799	4 34 48	4. 5715	4 34 17	19
20	4. 6023	4 36 08	4. 5938	4 35 37	4. 5852	4 35 07	4. 5768	4 34 36	20
21	4. 6075	4 36 27	4. 5990	4 35 56	4. 5904	4 35 25	4. 5820	4 34 55	21
22	4. 6129	4 36 46	4. 6042	4 36 15	4. 5956	4 35 43	4. 5872	4 35 14	22
23	4. 6181	4 37 15	4. 6094	4 36 34	4. 6008	4 36 03	4. 5924	4 35 33	23
24	4. 6234	4 37 24	4. 6148	4 36 53	4. 6062	4 36 22	4. 5977	4 35 52	24
25	4. 6284	4 37 42	4. 6200	4 37 12	4. 6113	4 36 41	4. 6029	4 36 10	25
26	4. 6339	4 38 02	4. 6253	4 37 31	4. 6167	4 37 00	4. 6082	4 36 30	26
27	4. 6392	4 38 21	4. 6306	4 37 50	4. 6219	4 37 19	4. 6135	4 36 49	27
28	4. 6445	4 38 40	4. 6359	4 38 09	4. 6272	4 37 38	4. 6187	4 37 07	28
29	4. 6499	4 39 00	4. 6412	4 38 28	4. 6326	4 37 57	4. 6240	4 37 26	29
30	4. 6552	4 39 19	4. 6465	4 38 47	4. 6379	4 38 16	4. 6293	4 37 45	30
31	4. 6605	4 39 38	4. 6519	4 39 07	4. 6432	4 38 36	4. 6346	4 38 05	31
32	4. 6660	4 39 58	4. 6572	4 39 26	4. 6485	4 38 54	4. 6400	4 38 24	32
33	4. 6713	4 40 17	4. 6626	4 39 45	4. 6540	4 39 14	4. 6454	4 38 43	33
34	4. 6767	4 40 36	4. 6680	4 40 05	4. 6593	4 39 33	4. 6508	4 39 03	34
35	4. 6812	4 40 56	4. 6733	4 40 24	4. 6647	4 39 53	4. 6561	4 39 22	35
36	4. 6876	4 41 15	4. 6789	4 40 44	4. 6702	4 40 13	4. 6615	4 39 41	36
37	4. 6929	4 41 34	4. 6842	4 41 03	4. 6755	4 40 32	4. 6669	4 40 01	37
38	4. 6984	4 41 54	4. 6897	4 41 23	4. 6809	4 40 51	4. 6723	4 40 20	38
39	4. 7039	4 42 14	4. 6951	4 41 42	4. 6864	4 41 11	4. 6778	4 40 40	39
40	4. 7093	4 42 33	4. 7006	4 42 02	4. 6918	4 41 30	4. 6832	4 41 00	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$7^h\ 32^m\ 00^s$		$7^h\ 32^m\ 30^s$		$7^h\ 33^m\ 00^s$		$7^h\ 33^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	4.4717	4 28 18	4.4633	4 27 48	4.4549	4 27 18	4.4468	4 26 48	1
2	4.4766	4 28 36	4.4683	4 28 06	4.4599	4 27 36	4.4514	4 27 05	2
3	4.4817	4 28 54	4.4733	4 28 24	4.4649	4 27 54	4.4564	4 27 23	3
4	4.4867	4 29 12	4.4783	4 28 42	4.4699	4 28 12	4.4614	4 27 41	4
5	4.4917	4 29 30	4.4833	4 29 00	4.4748	4 28 29	4.4664	4 27 59	5
6	4.4966	4 29 48	4.4883	4 29 18	4.4798	4 28 47	4.4714	4 28 17	6
7	4.5017	4 30 06	4.4934	4 29 36	4.4849	4 29 06	4.4764	4 28 35	7
8	4.5068	4 30 24	4.4984	4 29 54	4.4899	4 29 24	4.4815	4 28 53	8
9	4.5118	4 30 42	4.5034	4 30 12	4.4949	4 29 42	4.4864	4 29 11	9
10	4.5169	4 31 01	4.5085	4 30 30	4.5000	4 30 00	4.4915	4 29 29	10
11	4.5220	4 31 19	4.5135	4 30 49	4.5050	4 30 18	4.4966	4 29 48	11
12	4.5271	4 31 38	4.5187	4 31 07	4.5101	4 30 36	4.5016	4 30 06	12
13	4.5322	4 31 56	4.5238	4 31 26	4.5152	4 30 55	4.5067	4 30 24	13
14	4.5373	4 32 14	4.5288	4 31 44	4.5203	4 31 13	4.5118	4 30 42	14
15	4.5425	4 32 33	4.5340	4 32 02	4.5254	4 31 32	4.5169	4 31 01	15
16	4.5476	4 32 51	4.5391	4 32 20	4.5305	4 31 50	4.5220	4 31 19	16
17	4.5527	4 33 10	4.5442	4 32 39	4.5356	4 32 08	4.5271	4 31 38	17
18	4.5578	4 33 28	4.5493	4 32 57	4.5408	4 32 27	4.5322	4 31 56	18
19	4.5630	4 33 47	4.5545	4 33 16	4.5459	4 32 45	4.5373	4 32 14	19
20	4.5682	4 34 06	4.5598	4 33 35	4.5511	4 33 04	4.5425	4 32 34	20
21	4.5734	4 34 24	4.5649	4 33 54	4.5563	4 33 23	4.5477	4 32 52	21
22	4.5787	4 34 43	4.5701	4 34 12	4.5615	4 33 41	4.5529	4 33 10	22
23	4.5839	4 35 02	4.5754	4 34 31	4.5667	4 34 00	4.5581	4 33 29	23
24	4.5891	4 35 21	4.5805	4 34 50	4.5719	4 34 19	4.5633	4 33 48	24
25	4.5943	4 35 39	4.5857	4 35 09	4.5771	4 34 38	4.5684	4 34 06	25
26	4.5996	4 35 59	4.5910	4 35 28	4.5823	4 34 56	4.5737	4 34 25	26
27	4.6049	4 36 18	4.5963	4 35 47	4.5877	4 35 15	4.5790	4 34 44	27
28	4.6101	4 36 36	4.6015	4 36 05	4.5928	4 35 34	4.5842	4 35 03	28
29	4.6154	4 36 55	4.6068	4 36 24	4.5981	4 35 53	4.5894	4 35 22	29
30	4.6207	4 37 15	4.6121	4 36 44	4.6034	4 36 12	4.5947	4 35 41	30
31	4.6261	4 37 34	4.6174	4 37 03	4.6087	4 36 31	4.6000	4 36 00	31
32	4.6314	4 37 53	4.6228	4 37 22	4.6140	4 36 50	4.6053	4 36 19	32
33	4.6367	4 38 12	4.6281	4 37 41	4.6193	4 37 09	4.6106	4 36 38	33
34	4.6420	4 38 31	4.6334	4 38 00	4.6246	4 37 29	4.6159	4 36 57	34
35	4.6474	4 38 51	4.6388	4 38 20	4.6300	4 37 48	4.6212	4 37 16	35
36	4.6529	4 39 10	4.6442	4 38 39	4.6354	4 38 08	4.6267	4 37 36	36
37	4.6582	4 39 30	4.6495	4 38 58	4.6408	4 38 27	4.6320	4 37 56	37
38	4.6636	4 39 49	4.6548	4 39 17	4.6461	4 38 46	4.6373	4 38 14	38
39	4.6691	4 40 09	4.6603	4 39 37	4.6516	4 39 06	4.6428	4 38 34	39
40	4.6744	4 40 28	4.6658	4 39 57	4.6569	4 39 25	4.6481	4 38 53	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$7^h\ 34^m\ 00^s$		$7^h\ 34^m\ 30^s$		$7^h\ 35^m\ 00^s$		$7^h\ 35^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	4.4382	4 26 18	4.4299	4 25 48	4.4216	4 25 18	4.4133	4 24 48	1
2	4.4431	4 26 35	4.4348	4 26 05	4.4265	4 25 35	4.4182	4 25 06	2
3	4.4482	4 26 54	4.4398	4 26 23	4.4315	4 25 53	4.4231	4 25 23	3
4	4.4531	4 27 12	4.4447	4 26 41	4.4364	4 26 11	4.4280	4 25 41	4
5	4.4581	4 27 30	4.4497	4 26 59	4.4414	4 26 29	4.4330	4 25 59	5
6	4.4630	4 27 47	4.4546	4 27 17	4.4463	4 26 47	4.4380	4 26 17	6
7	4.4681	4 28 05	4.4597	4 27 35	4.4513	4 27 05	4.4429	4 26 34	7
8	4.4731	4 28 23	4.4647	4 27 53	4.4563	4 27 23	4.4479	4 26 52	8
9	4.4781	4 28 41	4.4696	4 28 11	4.4613	4 27 41	4.4529	4 27 10	9
10	4.4831	4 28 59	4.4745	4 28 28	4.4663	4 27 59	4.4579	4 27 28	10
11	4.4882	4 29 17	4.4797	4 28 47	4.4713	4 28 17	4.4629	4 27 46	11
12	4.4933	4 29 35	4.4848	4 29 05	4.4764	4 28 35	4.4680	4 28 05	12
13	4.4983	4 29 53	4.4898	4 29 23	4.4814	4 28 53	4.4730	4 28 23	13
14	4.5034	4 30 12	4.4949	4 29 42	4.4865	4 29 11	4.4781	4 28 41	14
15	4.5085	4 30 30	4.5000	4 30 00	4.4916	4 29 30	4.4831	4 28 59	15
16	4.5135	4 30 48	4.5051	4 30 18	4.4966	4 29 48	4.4882	4 29 18	16
17	4.5187	4 31 07	4.5101	4 30 36	4.5017	4 30 06	4.4933	4 29 36	17
18	4.5238	4 31 26	4.5152	4 30 55	4.5068	4 30 25	4.4983	4 29 54	18
19	4.5289	4 31 44	4.5203	4 31 13	4.5119	4 30 43	4.5034	4 30 12	19
20	4.5341	4 32 03	4.5255	4 31 32	4.5171	4 31 02	4.5086	4 30 31	20
21	4.5362	4 32 22	4.5307	4 31 51	4.5222	4 31 20	4.5137	4 30 49	21
22	4.5444	4 32 40	4.5359	4 32 09	4.5274	4 31 39	4.5189	4 31 08	22
23	4.5496	4 32 59	4.5410	4 32 28	4.5326	4 31 57	4.5240	4 31 27	23
24	4.5548	4 33 17	4.5462	4 32 46	4.5378	4 32 16	4.5292	4 31 45	24
25	4.5600	4 33 36	4.5513	4 33 05	4.5429	4 32 34	4.5343	4 32 03	25
26	4.5652	4 33 55	4.5566	4 33 24	4.5481	4 32 53	4.5395	4 32 22	26
27	4.5705	4 34 14	4.5618	4 33 42	4.5534	4 33 12	4.5448	4 32 41	27
28	4.5757	4 34 33	4.5670	4 34 01	4.5585	4 33 31	4.5499	4 33 00	28
29	4.5809	4 34 51	4.5722	4 34 20	4.5638	4 33 50	4.5552	4 33 19	29
30	4.5862	4 35 10	4.5775	4 34 39	4.5690	4 34 08	4.5604	4 33 37	30
31	4.5915	4 35 29	4.5828	4 34 58	4.5743	4 34 27	4.5657	4 33 57	31
32	4.5967	4 35 48	4.5881	4 35 17	4.5795	4 34 46	4.5709	4 34 15	32
33	4.6020	4 36 07	4.5933	4 35 36	4.5848	4 35 05	4.5762	4 34 34	33
34	4.6073	4 36 26	4.5987	4 35 55	4.5900	4 35 24	4.5814	4 34 53	34
35	4.6127	4 36 45	4.6039	4 36 14	4.5954	4 35 43	4.5867	4 35 12	35
36	4.6181	4 37 05	4.6093	4 36 33	4.6008	4 36 03	4.5921	4 35 32	36
37	4.6234	4 37 24	4.6147	4 36 53	4.6061	4 36 22	4.5974	4 35 51	37
38	4.6287	4 37 43	4.6200	4 37 12	4.6113	4 36 41	4.6027	4 36 10	38
39	4.6341	4 38 03	4.6254	4 37 31	4.6168	4 37 00	4.6081	4 36 29	39
40	4.6395	4 38 22	4.6308	4 37 51	4.6221	4 37 20	4.6134	4 36 48	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$7^h\ 36^m\ 00^s$		$7^h\ 36^m\ 30^s$		$7^h\ 37^m\ 00^s$		$7^h\ 37^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	4. 4049	4 24 18	4. 3966	4 23 48	4. 3882	4 23 18	4. 3799	4 22 48	1
2	4. 4098	4 24 35	4. 4015	4 24 05	4. 3931	4 23 35	4. 3848	4 23 05	2
3	4. 4147	4 24 53	4. 4064	4 24 23	4. 3981	4 23 53	4. 3897	4 23 23	3
4	4. 4197	4 25 11	4. 4113	4 24 41	4. 4029	4 24 10	4. 3945	4 23 40	4
5	4. 4247	4 25 29	4. 4163	4 24 59	4. 4079	4 24 28	4. 3995	4 23 58	5
6	4. 4296	4 25 47	4. 4212	4 25 16	4. 4128	4 24 46	4. 4045	4 24 16	6
7	4. 4346	4 26 05	4. 4261	4 25 34	4. 4177	4 25 04	4. 4095	4 24 34	7
8	4. 4396	4 26 23	4. 4312	4 25 52	4. 4227	4 25 22	4. 4144	4 24 52	8
9	4. 4445	4 26 40	4. 4361	4 26 10	4. 4276	4 25 39	4. 4193	4 25 09	9
10	4. 4495	4 26 58	4. 4411	4 26 28	4. 4326	4 25 57	4. 4241	4 25 27	10
11	4. 4545	4 27 16	4. 4461	4 26 46	4. 4376	4 26 15	4. 4291	4 25 45	11
12	4. 4595	4 27 34	4. 4512	4 27 04	4. 4426	4 26 33	4. 4342	4 26 03	12
13	4. 4646	4 27 53	4. 4561	4 27 22	4. 4476	4 26 51	4. 4393	4 26 21	13
14	4. 4697	4 28 11	4. 4612	4 27 40	4. 4527	4 27 10	4. 4443	4 26 39	14
15	4. 4747	4 28 29	4. 4662	4 27 58	4. 4577	4 27 28	4. 4493	4 26 57	15
16	4. 4797	4 28 47	4. 4712	4 28 16	4. 4627	4 27 46	4. 4542	4 27 15	16
17	4. 4848	4 29 05	4. 4763	4 28 35	4. 4678	4 28 04	4. 4592	4 27 33	17
18	4. 4899	4 29 24	4. 4813	4 28 53	4. 4728	4 28 22	4. 4643	4 27 51	18
19	4. 4949	4 29 42	4. 4865	4 29 11	4. 4778	4 28 40	4. 4694	4 28 10	19
20	4. 5001	4 30 00	4. 4916	4 29 30	4. 4830	4 28 58	4. 4744	4 28 28	20
21	4. 5052	4 30 18	4. 4966	4 29 48	4. 4881	4 29 17	4. 4796	4 28 47	21
22	4. 5103	4 30 37	4. 5017	4 30 06	4. 4933	4 29 36	4. 4848	4 29 05	22
23	4. 5154	4 30 55	4. 5069	4 30 25	4. 4983	4 29 54	4. 4899	4 29 24	23
24	4. 5207	4 31 15	4. 5121	4 30 44	4. 5035	4 30 12	4. 4950	4 29 42	24
25	4. 5258	4 31 33	4. 5173	4 31 02	4. 5086	4 30 31	4. 5000	4 30 00	25
26	4. 5309	4 31 51	4. 5224	4 31 21	4. 5138	4 30 50	4. 5052	4 30 19	26
27	4. 5362	4 32 10	4. 5276	4 31 39	4. 5190	4 31 08	4. 5104	4 30 37	27
28	4. 5413	4 32 29	4. 5327	4 31 58	4. 5241	4 31 26	4. 5155	4 30 56	28
29	4. 5466	4 32 48	4. 5380	4 32 17	4. 5293	4 31 45	4. 5207	4 31 15	29
30	4. 5518	4 33 06	4. 5432	4 32 36	4. 5345	4 32 04	4. 5259	4 31 33	30
31	4. 5570	4 33 25	4. 5484	4 32 54	4. 5397	4 32 23	4. 5312	4 31 52	31
32	4. 5623	4 33 44	4. 5536	4 33 13	4. 5450	4 32 42	4. 5363	4 32 11	32
33	4. 5675	4 34 03	4. 5589	4 33 32	4. 5503	4 33 01	4. 5415	4 32 29	33
34	4. 5728	4 34 22	4. 5641	4 33 51	4. 5554	4 33 19	4. 5468	4 32 48	34
35	4. 5781	4 34 41	4. 5694	4 34 10	4. 5607	4 33 39	4. 5521	4 33 08	35
36	4. 5834	4 35 00	4. 5747	4 34 29	4. 5660	4 33 58	4. 5574	4 33 27	36
37	4. 5887	4 35 19	4. 5801	4 34 48	4. 5713	4 34 17	4. 5627	4 33 46	37
38	4. 5940	4 35 38	4. 5853	4 35 07	4. 5766	4 34 35	4. 5679	4 34 04	38
39	4. 5994	4 35 58	4. 5907	4 35 27	4. 5819	4 34 55	4. 5732	4 34 23	39
40	4. 6047	4 36 17	4. 5960	4 35 46	4. 5872	4 35 14	4. 5784	4 34 42	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$7^h\ 38^m\ 00^s$		$7^h\ 38^m\ 30^s$		$7^h\ 39^m\ 00^s$		$7^h\ 39^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	4.3715	4 22 17	4.3631	4 21 47	4.3548	4 21 17	4.3465	4 20 47	1
2	4.3763	4 22 35	4.3680	4 22 05	4.3596	4 21 35	4.3513	4 21 05	2
3	4.3813	4 22 53	4.3729	4 22 22	4.3646	4 21 53	4.3562	4 21 22	3
4	4.3861	4 23 10	4.3777	4 22 40	4.3694	4 22 10	4.3610	4 21 40	4
5	4.3911	4 23 28	4.3827	4 22 58	4.3743	4 22 27	4.3660	4 21 58	5
6	4.3959	4 23 45	4.3875	4 23 15	4.3792	4 22 45	4.3708	4 22 15	6
7	4.4009	4 24 03	4.3925	4 23 33	4.3841	4 23 03	4.3757	4 22 33	7
8	4.4059	4 24 21	4.3974	4 23 51	4.3890	4 23 20	4.3807	4 22 51	8
9	4.4107	4 24 39	4.4023	4 24 08	4.3939	4 23 38	4.3855	4 23 08	9
10	4.4157	4 24 57	4.4073	4 24 26	4.3989	4 23 56	4.3905	4 23 26	10
11	4.4207	4 25 15	4.4122	4 24 44	4.4038	4 24 13	4.3954	4 23 43	11
12	4.4258	4 25 33	4.4172	4 25 02	4.4088	4 24 31	4.4004	4 24 02	12
13	4.4307	4 25 51	4.4222	4 25 20	4.4138	4 24 49	4.4053	4 24 19	13
14	4.4357	4 26 09	4.4272	4 25 38	4.4188	4 25 08	4.4103	4 24 37	14
15	4.4407	4 26 27	4.4322	4 25 56	4.4236	4 25 25	4.4153	4 24 55	15
16	4.4457	4 26 45	4.4372	4 26 14	4.4287	4 25 44	4.4203	4 25 13	16
17	4.4507	4 27 03	4.4422	4 26 32	4.4337	4 26 01	4.4253	4 25 31	17
18	4.4557	4 27 21	4.4472	4 26 50	4.4387	4 26 19	4.4303	4 25 49	18
19	4.4608	4 27 39	4.4522	4 27 08	4.4438	4 26 37	4.4353	4 26 07	19
20	4.4659	4 27 57	4.4574	4 27 27	4.4489	4 26 56	4.4404	4 26 25	20
21	4.4710	4 28 16	4.4624	4 27 45	4.4539	4 27 14	4.4454	4 26 43	21
22	4.4761	4 28 34	4.4675	4 28 03	4.4590	4 27 32	4.4505	4 27 02	22
23	4.4812	4 28 52	4.4726	4 28 21	4.4641	4 27 51	4.4555	4 27 20	23
24	4.4863	4 29 11	4.4778	4 28 40	4.4692	4 28 09	4.4607	4 27 39	24
25	4.4914	4 29 29	4.4828	4 28 58	4.4742	4 28 27	4.4657	4 27 57	25
26	4.4965	4 29 47	4.4880	4 29 17	4.4794	4 28 45	4.4709	4 28 15	26
27	4.5017	4 30 06	4.4932	4 29 36	4.4845	4 29 04	4.4760	4 28 34	27
28	4.5068	4 30 24	4.4982	4 29 54	4.4896	4 29 23	4.4811	4 28 52	28
29	4.5120	4 30 43	4.5034	4 30 12	4.4948	4 29 42	4.4862	4 29 10	29
30	4.5172	4 31 02	4.5086	4 30 31	4.5000	4 30 00	4.4914	4 29 29	30
31	4.5224	4 31 21	4.5138	4 30 49	4.5052	4 30 19	4.4965	4 29 47	31
32	4.5276	4 31 39	4.5190	4 31 08	4.5103	4 30 37	4.5017	4 30 06	32
33	4.5328	4 31 58	4.5242	4 31 27	4.5155	4 30 56	4.5069	4 30 25	33
34	4.5381	4 32 17	4.5294	4 31 46	4.5208	4 31 15	4.5121	4 30 44	34
35	4.5433	4 32 36	4.5346	4 32 05	4.5260	4031 34	4.5173	4 31 02	35
36	4.5486	4 32 55	4.5399	4 32 24	4.5313	4 31 53	4.5226	4 31 21	36
37	4.5539	4 33 14	4.5452	4 32 43	4.5365	4 32 11	4.5278	4 31 40	37
38	4.5591	4 33 33	4.5504	4 33 02	4.5417	4 32 30	4.5330	4 31 59	38
39	4.5644	4 33 52	4.5558	4 33 21	4.5471	4 32 50	4.5384	4 32 18	39
40	4.5697	4 34 11	4.5610	4 33 40	4.5523	4 33 08	4.5436	4 32 37	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$7^h\ 40^m\ 00^s$		$7^h\ 40^m\ 30^s$		$7^h\ 41^m\ 00^s$		$7^h\ 41^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	4.3381	4 20 17	4.3298	4 19 47	4.3215	4 19 17	4.3132	4 18 48	1
2	4.3429	4 20 34	4.3347	4 20 05	4.3262	4 19 34	4.3180	4 19 05	2
3	4.3478	4 20 52	4.3395	4 20 22	4.3312	4 19 52	4.3229	4 19 22	3
4	4.3526	4 21 09	4.3443	4 20 39	4.3359	4 20 09	4.3276	4 19 39	4
5	4.3575	4 21 27	4.3492	4 20 57	4.3408	4 20 27	4.3325	4 19 57	5
6	4.3624	4 21 45	4.3541	4 21 15	4.3456	4 20 44	4.3373	4 20 14	6
7	4.3673	4 22 02	4.3589	4 21 32	4.3505	4 21 02	4.3422	4 20 32	7
8	4.3722	4 22 20	4.3639	4 21 50	4.3554	4 21 19	4.3471	4 20 50	8
9	4.3770	4 22 37	4.3686	4 22 07	4.3602	4 21 37	4.3520	4 21 07	9
10	4.3820	4 22 55	4.3736	4 22 25	4.3652	4 21 55	4.3568	4 21 24	10
11	4.3869	4 23 13	4.3786	4 22 43	4.3701	4 22 12	4.3618	4 21 42	11
12	4.3918	4 23 30	4.3835	4 23 00	4.3750	4 22 30	4.3667	4 22 00	12
13	4.3968	4 23 48	4.3884	4 23 18	4.3799	4 22 48	4.3716	4 22 18	13
14	4.4018	4 24 06	4.3934	4 23 36	4.3849	4 23 06	4.3766	4 22 36	14
15	4.4068	4 24 24	4.3983	4 23 54	4.3898	4 23 23	4.3815	4 22 53	15
16	4.4117	4 24 42	4.4033	4 24 12	4.3948	4 23 41	4.3864	4 23 11	16
17	4.4167	4 25 00	4.4082	4 24 30	4.3998	4 23 59	4.3914	4 23 39	17
18	4.4217	4 25 18	4.4133	4 24 49	4.4047	4 24 17	4.3963	4 23 47	18
19	4.4267	4 25 36	4.4183	4 25 06	4.4097	4 24 35	4.4013	4 24 05	19
20	4.4318	4 25 54	4.4233	4 25 24	4.4148	4 24 53	4.4064	4 24 23	20
21	4.4368	4 26 12	4.4283	4 25 42	4.4199	4 25 12	4.4113	4 24 41	21
22	4.4419	4 26 31	4.4334	4 26 00	4.4249	4 25 30	4.4164	4 24 59	22
23	4.4469	4 26 49	4.4384	4 26 18	4.4299	4 25 48	4.4214	4 25 17	23
24	4.4521	4 27 07	4.4436	4 26 37	4.4350	4 26 06	4.4265	4 25 35	24
25	4.4571	4 27 26	4.4485	4 26 55	4.4400	4 26 24	4.4315	4 25 53	25
26	4.4622	4 27 44	4.4537	4 27 13	4.4451	4 26 42	4.4366	4 26 12	26
27	4.4673	4 28 02	4.4588	4 27 32	4.4502	4 27 01	4.4417	4 26 30	27
28	4.4724	4 28 21	4.4639	4 27 50	4.4552	4 27 19	4.4467	4 26 48	28
29	4.4776	4 28 39	4.4690	4 28 08	4.4604	4 27 37	4.4519	4 27 07	29
30	4.4827	4 28 58	4.4741	4 28 27	4.4655	4 27 56	4.4570	4 27 25	30
31	4.4878	4 29 16	4.4793	4 28 45	4.4707	4 28 15	4.4621	4 27 44	31
32	4.4930	4 29 35	4.4845	4 29 04	4.4756	4 28 33	4.4672	4 28 02	32
33	4.4982	4 29 54	4.4897	4 29 23	4.4810	4 28 52	4.4724	4 28 21	33
34	4.5034	4 30 12	4.4948	4 29 41	4.4861	4 29 10	4.4776	4 28 39	34
35	4.5086	4 30 31	4.5000	4 30 00	4.4913	4 29 29	4.4827	4 28 58	35
36	4.5139	4 30 50	4.5052	4 30 19	4.4965	4 29 47	4.4879	4 29 16	36
37	4.5191	4 31 08	4.5104	4 30 37	4.5017	4 30 06	4.4931	4 29 35	37
38	4.5243	4 31 27	4.5156	4 30 56	4.5069	4 30 24	4.4983	4 29 54	38
39	4.5296	4 31 47	4.5210	4 31 16	4.5122	4 30 44	4.5036	4 30 13	39
40	4.5348	4 32 05	4.5262	4 31 34	4.5174	4 31 03	4.5088	4 30 31	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$7^h\ 42^m\ 00^s$		$7^h\ 42^m\ 30^s$		$7^h\ 43^m\ 00^s$		$7^h\ 43^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	4.3048	4 18 17	4.2965	4 17 47	4.2881	4 17 17	4.2798	4 16 47	1
2	4.3095	4 18 34	4.3012	4 18 04	4.2928	4 17 34	4.2845	4 17 04	2
3	4.3144	4 18 52	4.3061	4 18 21	4.2976	4 17 52	4.2893	4 17 22	3
4	4.3192	4 19 09	4.3108	4 18 39	4.3024	4 18 09	4.2941	4 17 39	4
5	4.3240	4 19 26	4.3157	4 18 57	4.3073	4 18 26	4.2989	4 17 56	5
6	4.3288	4 19 44	4.3205	4 19 14	4.3121	4 18 44	4.3037	4 18 13	6
7	4.3337	4 20 01	4.3254	4 19 31	4.3169	4 19 01	4.3086	4 18 31	7
8	4.3386	4 20 19	4.3302	4 19 49	4.3218	4 19 18	4.3134	4 18 48	8
9	4.3434	4 20 36	4.3350	4 20 06	4.3266	4 19 36	4.3182	4 19 06	9
10	4.3483	4 20 54	4.3399	4 20 24	4.3314	4 19 53	4.3230	4 19 23	10
11	4.3532	4 21 11	4.3448	4 20 41	4.3363	4 20 11	4.3279	4 19 40	11
12	4.3581	4 21 29	4.3497	4 20 59	4.3412	4 20 28	4.3328	4 19 58	12
13	4.3631	4 21 47	4.3546	4 21 17	4.3461	4 20 46	4.3377	4 20 16	13
14	4.3680	4 22 04	4.3595	4 21 34	4.3510	4 21 04	4.3426	4 20 33	14
15	4.3729	4 22 22	4.3644	4021 52	4.3559	4 21 21	4.3475	4 20 51	15
16	4.3779	4 22 40	4.3694	4 22 10	4.3608	4 21 39	4.3524	4 21 09	16
17	4.3828	4 22 58	4.3743	4 22 27	4.3658	4 21 57	4.3574	4 21 27	17
18	4.3878	4 23 16	4.3792	4 22 45	4.3707	4 22 14	4.3623	4 21 44	18
19	4.3927	4 23 34	4.3842	4 23 03	4.3756	4 22 32	4.3672	4 22 02	19
20	4.3977	4 23 52	4.3892	4 23 21	4.3807	4 22 50	4.3722	4 22 20	20
21	4.4027	4 24 10	4.3942	4 23 39	4.3856	4 23 08	4.3771	4 22 38	21
22	4.4078	4 24 28	4.3992	4 23 57	4.3907	4 23 27	4.3822	4 22 56	22
23	4.4128	4 24 46	4.4043	4 24 15	4.3956	4 23 45	4.3871	4 23 14	23
24	4.4178	4 25 04	4.4093	4 24 33	4.4007	4 24 03	4.3922	4 23 32	24
25	4.4228	4 25 22	4.4143	4 24 51	4.4057	4 24 21	4.3972	4 23 50	25
26	4.4279	4 25 40	4.4194	4 25 10	4.4108	4 24 39	4.4022	4 24 08	26
27	4.4330	4 25 59	4.4245	4 25 28	4.4158	4 24 57	4.4073	4 24 26	27
28	4.4381	4 26 17	4.4295	4 25 46	4.4208	4 25 15	4.4122	4 24 44	28
29	4.4431	4 26 35	4.4346	4 26 05	4.4259	4 25 33	4.4173	4 25 02	29
30	4.4483	4 26 54	4.4397	4 26 23	4.4310	4 25 52	4.4224	4 25 21	30
31	4.4534	4 27 12	4.4448	4 26 42	4.4361	4 26 10	4.4275	4 25 39	31
32	4.4585	4 27 31	4.4499	4 27 00	4.4412	4 26 28	4.4326	4 25 57	32
33	4.4636	4 27 49	4.4550	4 27 18	4.4463	4 26 47	4.4377	4 26 16	33
34	4.4688	4 28 08	4.4601	4 27 36	4.4514	4 27 05	4.4429	4 26 34	34
35	4.4739	4 28 26	4.4653	4 27 55	4.4566	4 27 24	4.4480	4 26 53	35
36	4.4792	4 28 45	4.4706	4 28 14	4.4618	4 27 42	4.4531	4 27 11	36
37	4.4843	4 29 03	4.4757	4 28 32	4.4670	4 28 01	4.4583	4 27 30	37
38	4.4895	4 29 22	4.4809	4 28 51	4.4721	4 28 19	4.4635	4 27 49	38
39	4.4948	4 29 41	4.4861	4 29 10	4.4773	4 28 38	4.4687	4 28 07	39
40	4.5000	4 30 00	4.4913	4 29 29	4.4825	4 28 57	4.4738	4 28 26	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$7^h\ 44^m\ 00^s$		$7^h\ 44^m\ 30^s$		$7^h\ 45^m\ 00^s$		$7^h\ 45^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	4.2714	4 16 17	4.2630	4 15 47	4.2547	4 15 17	4.2464	4 14 47	1
2	4.2762	4 16 34	4.2678	4 16 04	4.2594	4 15 34	4.2511	4 15 04	2
3	4.2809	4 16 51	4.2726	4 16 21	4.2642	4 15 51	4.2559	4 15 21	3
4	4.2857	4 17 08	4.2773	4 16 38	4.2690	4 16 08	4.2606	4 15 38	4
5	4.2905	4 17 26	4.2821	4 16 56	4.2738	4 16 26	4.2654	4 15 55	5
6	4.2953	4 17 43	4.2869	4 17 13	4.2785	4 16 43	4.2701	4 16 12	6
7	4.3001	4 18 00	4.2917	4 17 30	4.2833	4 17 00	4.2750	4 16 30	7
8	4.3050	4 18 18	4.2965	4 17 47	4.2882	4 17 17	4.2798	4 16 47	8
9	4.3098	4 18 35	4.3013	4 18 04	4.2929	4 17 34	4.2845	4 17 04	9
10	4.3146	4 18 53	4.3062	4 18 22	4.2977	4 17 52	4.2893	4 17 21	10
11	4.3195	4 19 10	4.3110	4 18 40	4.3026	4 18 09	4.2942	4 17 39	11
12	4.3243	4 19 27	4.3159	4 18 57	4.3075	4 18 27	4.2990	4 17 56	12
13	4.3292	4 19 45	4.3208	4 19 15	4.3123	4 18 44	4.3039	4 18 14	13
14	4.3341	4 20 02	4.3256	4 19 32	4.3172	4 19 02	4.3087	4 18 31	14
15	4.3390	4 20 20	4.3305	4 19 50	4.3220	4 19 19	4.3136	4 18 49	15
16	4.3439	4 20 38	4.3354	4 20 07	4.3269	4 19 37	4.3184	4 19 06	16
17	4.3488	4 20 56	4.3403	4 20 25	4.3318	4 19 55	4.3233	4 19 24	17
18	4.3537	4 21 14	4.3452	4 20 43	4.3367	4 20 12	4.3283	4 19 42	18
19	4.3586	4 21 31	4.3502	4 21 00	4.3416	4 20 30	4.3332	4 20 00	19
20	4.3637	4 21 49	4.3551	4 21 18	4.3466	4 20 48	4.3381	4 20 17	20
21	4.3686	4 22 07	4.3600	4 21 36	4.3515	4 21 05	4.3430	4 20 35	21
22	4.3736	4 22 25	4.3650	4 21 54	4.3565	4 21 23	4.3480	4 20 53	22
23	4.3786	4 22 43	4.3700	4 22 12	4.3614	4 21 41	4.3529	4 21 10	23
24	4.3836	4 23 01	4.3750	4 22 30	4.3665	4 21 59	4.3579	4 21 28	24
25	4.3886	4 23 19	4.3800	4 22 48	4.3714	4 22 17	4.3629	4 21 46	25
26	4.3936	4 23 37	4.3850	4 23 06	4.3765	4 22 35	4.3678	4 22 04	26
27	4.3987	4 23 55	4.3900	4 23 24	4.3815	4 22 53	4.3729	4 22 22	27
28	4.4037	4 24 13	4.3950	4 23 42	4.3864	4 23 11	4.3779	4 22 40	28
29	4.4087	4 24 31	4.4000	4 24 00	4.3915	4 23 29	4.3829	4 22 58	29
30	4.4138	4 24 50	4.4051	4 24 18	4.3965	4 23 47	4.3879	4 23 16	30
31	4.4188	4 25 08	4.4102	4 24 37	4.4016	4 24 06	4.3930	4 23 35	31
32	4.4239	4 25 26	4.4153	4 24 55	4.4066	4 24 24	4.3981	4 23 53	32
33	4.4290	4 25 44	4.4204	4 25 13	4.4117	4 24 42	4.4031	4 24 11	33
34	4.4342	4 26 03	4.4255	4 25 32	4.4168	4 25 00	4.4082	4 24 30	34
35	4.4393	4 26 21	4.4306	4 25 50	4.4219	4 25 19	4.4133	4 24 48	35
36	4.4445	4 26 40	4.4558	4 26 08	4.4271	4 25 38	4.4184	4 25 06	36
37	4.4496	4 26 59	4.4409	4 26 27	4.4322	4 25 56	4.4235	4 25 25	37
38	4.4547	4 27 17	4.4460	4 26 46	4.4373	4 26 14	4.4287	4 25 43	38
39	4.4599	4 27 36	4.4512	4 27 04	4.4425	4 26 33	4.4338	4 26 02	39
40	4.4651	4 27 54	4.4563	4 27 23	4.4476	4 26 51	4.4389	4 26 20	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$7^h\ 46^m\ 00^s$		$7^h\ 46^m\ 30^s$		$7^h\ 47^m\ 00^s$		$7^h\ 47^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	4.2380	4 14 17	4.2297	4 13 47	4.2213	4 13 17	4.2130	4 12 47	1
2	4.2427	4 14 34	4.2344	4 14 04	4.2260	4 13 33	4.2177	4 13 04	2
3	4.2475	4 14 51	4.2391	4 14 21	4.2308	4 13 50	4.2225	4 13 21	3
4	4.2522	4 15 08	4.2439	4 14 38	4.2355	4 14 08	4.2272	4 13 38	4
5	4.2570	4 15 25	4.2486	4 14 55	4.2402	4 14 25	4.2317	4 13 54	5
6	4.2617	4 15 42	4.2533	4 15 12	4.2450	4 14 42	4.2366	4 14 11	6
7	4.2664	4 15 59	4.2582	4 15 29	4.2497	4 14 58	4.2414	4 14 29	7
8	4.2713	4 16 17	4.2630	4 15 47	4.2545	4 15 16	4.2462	4 14 46	8
9	4.2761	4 16 34	4.2677	4 16 04	4.2593	4 15 33	4.2509	4 15 03	9
10	4.2808	4 16 51	4.2725	4 16 21	4.2640	4 15 50	4.2557	4 15 20	10
11	4.2857	4 17 08	4.2773	4 16 38	4.2689	4 16 08	4.2605	4 15 37	11
12	4.2906	4 17 26	4.2822	4 16 55	4.2737	4 16 25	4.2653	4 15 55	12
13	4.2954	4 17 43	4.2870	4 17 13	4.2785	4 16 42	4.2702	4 16 12	13
14	4.3002	4 18 00	4.2918	4 17 30	4.2834	4 17 00	4.2750	4 16 30	14
15	4.3051	4 18 18	4.2967	4 17 48	4.2881	4 17 17	4.2798	4 16 47	15
16	4.3099	4 18 36	4.3015	4 18 05	4.2930	4 17 34	4.2846	4 17 04	16
17	4.3148	4 18 53	4.3064	4 18 23	4.2979	4 17 52	4.2895	4 17 22	17
18	4.3197	4 19 11	4.3112	4 18 40	4.3027	4 18 09	4.2943	4 17 39	18
19	4.3246	4 19 28	4.3161	4 18 58	4.3076	4 18 27	4.2991	4 17 57	19
20	4.3295	4 19 46	4.3210	4 19 16	4.3125	4 18 45	4.3040	4 18 14	20
21	4.3344	4 20 03	4.3259	4 19 33	4.3174	4 19 02	4.3089	4 18 32	21
22	4.3394	4 20 21	4.3309	4 19 51	4.3223	4 19 20	4.3139	4 18 50	22
23	4.3443	4 20 39	4.3358	4 20 08	4.3272	4 19 37	4.3188	4 19 07	23
24	4.3493	4 20 57	4.3408	4 20 26	4.3322	4 19 55	4.3238	4 19 25	24
25	4.3542	4 21 15	4.3457	4 20 44	4.3371	4 20 13	4.3286	4 19 42	25
26	4.3592	4 21 33	4.3507	4 21 02	4.3421	4 20 31	4.3336	4 20 00	26
27	4.3642	4 21 51	4.3557	4 21 20	4.3471	4 20 49	4.3386	4 20 18	27
28	4.3692	4 22 09	4.3606	4 21 38	4.3521	4 21 07	4.3435	4 20 36	28
29	4.3742	4 22 27	4.3657	4 21 56	4.3570	4 21 25	4.3486	4 20 54	29
30	4.3793	4 22 45	4.3707	4 22 14	4.3620	4 21 43	4.3535	4 21 12	30
31	4.3843	4 23 03	4.3758	4 22 32	4.3670	4 22 01	4.3585	4 21 30	31
32	4.3894	4 23 21	4.3807	4 22 50	4.3721	4 22 19	4.3636	4 21 48	32
33	4.3944	4 23 40	4.3858	4 23 09	4.3770	4 22 37	4.3685	4 22 06	33
34	4.3995	4 23 58	4.3909	4 23 27	4.3822	4 22 55	4.3736	4 22 24	34
35	4.4045	4 24 16	4.3959	4 23 45	4.3872	4 23 13	4.3786	4 22 42	35
36	4.4097	4 24 34	4.4011	4 24 03	4.3924	4 23 32	4.3838	4 23 01	36
37	4.4148	4 24 53	4.4062	4 24 22	4.3974	4 23 50	4.3888	4 23 19	37
38	4.4199	4 25 11	4.4112	4 24 40	4.4025	4 24 09	4.3939	4 23 38	38
39	4.4251	4 25 30	4.4164	4 24 59	4.4077	4 24 27	4.3991	4 23 56	39
40	4.4302	4 25 49	4.4215	4 25 17	4.4128	4 24 46	4.4041	4 24 15	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$7^h\ 48^m\ 00^s$		$7^h\ 48^m\ 30^s$		$7^h\ 49^m\ 00^s$		$7^h\ 49^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	4.2046	4 12 17	4.1963	4 11 47	4.1879	4 11 16	4.1796	4 10 47	1
2	4.2093	4 12 33	4.2010	4 12 04	4.1926	4 11 33	4.1843	4 11 03	2
3	4.2140	4 12 50	4.2057	4 12 21	4.1973	4 11 50	4.1890	4 11 20	3
4	4.2187	4 13 07	4.2104	4 12 37	4.2019	4 12 07	4.1936	4 11 37	4
5	4.2234	4 13 24	4.2151	4 12 54	4.2067	4 12 24	4.1984	4 11 54	5
6	4.2281	4 13 41	4.2198	4 13 11	4.2115	4 12 41	4.2030	4 12 11	6
7	4.2329	4 13 58	4.2245	4 13 28	4.2161	4 12 58	4.2077	4 12 28	7
8	4.2376	4 14 15	4.2293	4 13 45	4.2209	4 13 15	4.2125	4 12 45	8
9	4.2424	4 14 33	4.2340	4 14 02	4.2256	4 13 32	4.2172	4 13 02	9
10	4.2472	4 14 50	4.2388	4 14 20	4.2303	4 13 49	4.2219	4 13 19	10
11	4.2520	4 15 07	4.2436	4 14 37	4.2351	4 14 06	4.2267	4 13 36	11
12	4.2567	4 15 24	4.2484	4 14 54	4.2398	4 14 23	4.2315	4 13 53	12
13	4.2616	4 15 42	4.2531	4 15 11	4.2447	4 14 40	4.2362	4 14 10	13
14	4.2664	4 15 59	4.2580	4 15 29	4.2494	4 14 58	4.2410	4 14 28	14
15	4.2712	4 16 16	4.2628	4 15 46	4.2542	4 15 15	4.2458	4 14 45	15
16	4.2761	4 16 34	4.2675	4 16 03	4.2591	4 15 33	4.2506	4 15 02	16
17	4.2808	4 16 51	4.2724	4 16 21	4.2638	4 15 50	4.2554	4 15 19	17
18	4.2857	4 17 09	4.2772	4 16 38	4.2686	4 16 07	4.2602	4 15 37	18
19	4.2906	4 17 26	4.2821	4 16 56	4.2734	4 16 24	4.2650	4 15 54	19
20	4.2955	4 17 44	4.2870	4 17 13	4.2784	4 16 42	4.2699	4 16 12	20
21	4.3003	4 18 01	4.2918	4 17 30	4.2833	4 17 00	4.2747	4 16 29	21
22	4.3053	4 18 19	4.2968	4 17 48	4.2884	4 17 18	4.2797	4 16 47	22
23	4.3102	4 18 37	4.3016	4 18 05	4.2930	4 17 35	4.2845	4 17 04	23
24	4.3152	4 18 55	4.3066	4 18 23	4.2979	4 17 52	4.2894	4 17 22	24
25	4.3200	4 19 12	4.3114	4 18 41	4.3028	4 18 10	4.2943	4 17 39	25
26	4.3249	4 19 29	4.3164	4 18 59	4.3077	4 18 28	4.2992	4 17 57	26
27	4.3299	4 19 48	4.3214	4 19 17	4.3127	4 18 46	4.3042	4 18 14	27
28	4.3349	4 20 06	4.3262	4 19 34	4.3176	4 19 03	4.3090	4 18 32	28
29	4.3398	4 20 23	4.3312	4 19 52	4.3225	4 19 21	4.3140	4 18 50	29
30	4.3448	4 20 41	4.3362	4 20 10	4.3275	4 19 39	4.3190	4 19 08	30
31	4.3498	4 20 59	4.3412	4 20 28	4.3325	4 19 57	4.3239	4 19 26	31
32	4.3548	4 21 17	4.3462	4 20 46	4.3375	4 20 15	4.3289	4 19 44	32
33	4.3598	4 21 35	4.3512	4 21 04	4.3426	4 20 33	4.3339	4 20 02	33
34	4.3648	4 21 53	4.3562	4 21 22	4.3475	4 20 51	4.3389	4 20 20	34
35	4.3698	4 22 11	4.3612	4 21 40	4.3525	4 21 09	4.3439	4 20 38	35
36	4.3750	4 22 30	4.3664	4 21 59	4.3576	4 21 27	4.3490	4 20 56	36
37	4.3801	4 22 48	4.3714	4 22 17	4.3626	4 21 45	4.3540	4 21 14	37
38	4.3852	4 23 06	4.3764	4 22 35	4.3677	4 22 04	4.3590	4 21 32	38
39	4.3903	4 23 25	4.3815	4 22 53	4.3728	4 22 22	4.3642	4 21 51	39
40	4.3953	4 23 44	4.3866	4 23 12	4.3778	4 22 40	4.3692	4 22 09	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$7^h\ 50^m\ 00^s$		$7^h\ 50^m\ 30^s$		$7^h\ 51^m\ 00^s$		$7^h\ 51^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	4. 1713	4 10 17	4. 1629	4 09 46	4. 1546	4 09 17	4. 1463	4 08 47	1
2	4. 1759	4 10 33	4. 1675	4 10 03	4. 1592	4 09 33	4. 1509	4 09 03	2
3	4. 1806	4 10 50	4. 1723	4 10 20	4. 1639	4 09 50	4. 1555	4 09 20	3
4	4. 1852	4 11 07	4. 1769	4 10 37	4. 1685	4 10 07	4. 1602	4 09 37	4
5	4. 1900	4 11 24	4. 1816	4 10 54	4. 1732	4 10 23	4. 1648	4 09 53	5
6	4. 1946	4 11 41	4. 1862	4 11 10	4. 1778	4 10 40	4. 1695	4 10 10	6
7	4. 1993	4 11 58	4. 1909	4 11 27	4. 1825	4 10 57	4. 1742	4 10 27	7
8	4. 2041	4 12 15	4. 1956	4 11 44	4. 1873	4 11 14	4. 1789	4 10 44	8
9	4. 2087	4 12 32	4. 2003	4 12 01	4. 1919	4 11 31	4. 1835	4 11 01	9
10	4. 2135	4 12 49	4. 2050	4 12 18	4. 1966	4 11 48	4. 1882	4 11 18	10
11	4. 2182	4 13 06	4. 2098	4 12 35	4. 2014	4 12 05	4. 1930	4 11 35	11
12	4. 2230	4 13 23	4. 2145	4 12 52	4. 2061	4 12 22	4. 1977	4 11 52	12
13	4. 2278	4 13 40	4. 2193	4 13 09	4. 2108	4 12 39	4. 2024	4 12 09	13
14	4. 2325	4 13 57	4. 2241	4 13 27	4. 2156	4 12 56	4. 2072	4 12 26	14
15	4. 2373	4 14 14	4. 2288	4 13 44	4. 2204	4 13 13	4. 2119	4 12 43	15
16	4. 2421	4 14 32	4. 2336	4 14 01	4. 2251	4 13 30	4. 2166	4 13 00	16
17	4. 2469	4 14 49	4. 2384	4 14 18	4. 2299	4 13 48	4. 2214	4 13 17	17
18	4. 2517	4 15 06	4. 2432	4 14 36	4. 2347	4 14 05	4. 2262	4 13 34	18
19	4. 2565	4 15 23	4. 2480	4 14 53	4. 2395	4 14 22	4. 2310	4 13 52	19
20	4. 2614	4 15 41	4. 2528	4 15 10	4. 2443	4 14 39	4. 2358	4 14 09	20
21	4. 2662	4 15 58	4. 2576	4 15 27	4. 2491	4 14 57	4. 2406	4 14 26	21
22	4. 2711	4 16 16	4. 2625	4 15 45	4. 2540	4 15 14	4. 2455	4 14 44	22
23	4. 2759	4 16 33	4. 2674	4 16 03	4. 2588	4 15 32	4. 2503	4 15 01	23
24	4. 2808	4 16 51	4. 2723	4 16 20	4. 2637	4 15 49	4. 2552	4 15 19	24
25	4. 2856	4 17 08	4. 2771	4 16 38	4. 2685	4 16 07	4. 2600	4 15 36	25
26	4. 2906	4 17 26	4. 2820	4 16 55	4. 2735	4 16 25	4. 2649	4 15 54	26
27	4. 2956	4 17 44	4. 2870	4 17 13	4. 2784	4 16 42	4. 2698	4 16 11	27
28	4. 3004	4 18 01	4. 2918	4 17 30	4. 2832	4 17 00	4. 2746	4 16 29	28
29	4. 3054	4 18 19	4. 2967	4 17 48	4. 2882	4 17 18	4. 2796	4 16 47	29
30	4. 3103	4 18 37	4. 3017	4 18 06	4. 2931	4 17 35	4. 2845	4 17 04	30
31	4. 3153	4 18 55	4. 3067	4 18 24	4. 2980	4 17 53	4. 2894	4 17 22	31
32	4. 3203	4 19 13	4. 3116	4 18 42	4. 3030	4 18 11	4. 2944	4 17 40	32
33	4. 3252	4 19 31	4. 3166	4 19 00	4. 3079	4 18 28	4. 2993	4 17 57	33
34	4. 3302	4 19 49	4. 3216	4 19 18	4. 3129	4 18 46	4. 3043	4 18 15	34
35	4. 3352	4 20 07	4. 3265	4 19 35	4. 3179	4 19 04	4. 3092	4 18 33	35
36	4. 3403	4 20 25	4. 3316	4 19 54	4. 3229	4 19 22	4. 3143	4 18 52	36
37	4. 3453	4 20 43	4. 3366	4 20 12	4. 3279	4 19 40	4. 3193	4 19 09	37
38	4. 3503	4 21 01	4. 3416	4 20 30	4. 3329	4 19 59	4. 3242	4 19 27	38
39	4. 3554	4 21 19	4. 3467	4 20 48	4. 3380	4 20 17	4. 3293	4 19 45	39
40	4. 3604	4 21 37	4. 3517	4 21 06	4. 3430	4 20 35	4. 3343	4 20 03	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$7^h\ 52^m\ 00^s$		$7^h\ 52^m\ 30^s$		$7^h\ 53^m\ 00^s$		$7^h\ 53^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	4. 1379	4 08 16	4. 1296	4 07 47	4. 1213	4 07 17	4. 1129	4 06 46	1
2	4. 1425	4 08 33	4. 1342	4 08 03	4. 1258	4 07 33	4. 1175	4 07 03	2
3	4. 1472	4 08 50	4. 1388	4 08 20	4. 1305	4 07 50	4. 1221	4 07 20	3
4	4. 1517	4 09 06	4. 1435	4 08 37	4. 1350	4 08 06	4. 1267	4 07 36	4
5	4. 1564	4 09 23	4. 1481	4 08 53	4. 1396	4 08 23	4. 1313	4 07 53	5
6	4. 1610	4 09 40	4. 1527	4 09 10	4. 1443	4 08 39	4. 1359	4 08 09	6
7	4. 1657	4 09 57	4. 1574	4 09 28	4. 1490	4 08 56	4. 1405	4 08 26	7
8	4. 1704	4 10 13	4. 1621	4 09 44	4. 1536	4 09 13	4. 1453	4 08 43	8
9	4. 1750	4 10 30	4. 1667	4 10 00	4. 1583	4 09 30	4. 1498	4 08 59	9
10	4. 1797	4 10 47	4. 1714	4 10 16	4. 1629	4 09 46	4. 1545	4 09 16	10
11	4. 1845	4 11 04	4. 1761	4 10 34	4. 1676	4 10 03	4. 1592	4 09 33	11
12	4. 1892	4 11 21	4. 1808	4 10 51	4. 1724	4 10 21	4. 1639	4 09 50	12
13	4. 1939	4 11 38	4. 1855	4 11 08	4. 1771	4 10 39	4. 1685	4 10 07	13
14	4. 1986	4 11 55	4. 1903	4 11 25	4. 1818	4 10 55	4. 1733	4 10 24	14
15	4. 2034	4 12 12	4. 1950	4 11 42	4. 1865	4 11 11	4. 1780	4 10 41	15
16	4. 2081	4 12 29	4. 1997	4 11 59	4. 1912	4 11 29	4. 1827	4 10 58	16
17	4. 2129	4 12 46	4. 2045	4 12 16	4. 1959	4 11 45	4. 1875	4 11 15	17
18	4. 2176	4 13 03	4. 2092	4 12 33	4. 2007	4 12 03	4. 1922	4 11 32	18
19	4. 2224	4 13 21	4. 2140	4 12 50	4. 2054	4 12 19	4. 1969	4 11 49	19
20	4. 2273	4 13 39	4. 2188	4 13 08	4. 2103	4 12 37	4. 2017	4 12 06	20
21	4. 2321	4 13 56	4. 2236	4 13 25	4. 2150	4 12 54	4. 2065	4 12 23	21
22	4. 2369	4 14 13	4. 2285	4 13 43	4. 2199	4 13 12	4. 2113	4 12 41	22
23	4. 2417	4 14 30	4. 2332	4 13 59	4. 2246	4 13 29	4. 2161	4 12 58	23
24	4. 2466	4 14 48	4. 2381	4 14 17	4. 2295	4 13 46	4. 2209	4 13 15	24
25	4. 2513	4 15 05	4. 2429	4 14 34	4. 2343	4 14 03	4. 2257	4 13 33	25
26	4. 2563	4 15 23	4. 2478	4 14 52	4. 2392	4 14 21	4. 2306	4 13 50	26
27	4. 2612	4 15 40	4. 2526	4 15 09	4. 2440	4 14 38	4. 2355	4 14 08	27
28	4. 2660	4 15 58	4. 2575	4 15 27	4. 2488	4 14 56	4. 2400	4 14 24	28
29	4. 2709	4 16 15	4. 2624	4 15 45	4. 2537	4 15 13	4. 2451	4 14 42	29
30	4. 2758	4 16 33	4. 2673	4 16 03	4. 2586	4 15 31	4. 2500	4 15 00	30
31	4. 2807	4 16 51	4. 2722	4 16 20	4. 2635	4 15 49	4. 2549	4 15 18	31
32	4. 2857	4 17 09	4. 2771	4 16 38	4. 2685	4 16 07	4. 2598	4 15 35	32
33	4. 2906	4 17 26	4. 2820	4 16 55	4. 2734	4 16 24	4. 2647	4 15 53	33
34	4. 2956	4 17 44	4. 2870	4 17 13	4. 2783	4 16 42	4. 2696	4 16 11	34
35	4. 3005	4 18 02	4. 2919	4 17 31	4. 2832	4 17 00	4. 2745	4 16 28	35
36	4. 3056	4 18 20	4. 2969	4 17 49	4. 2883	4 17 18	4. 2796	4 16 47	36
37	4. 3105	4 18 38	4. 3019	4 18 07	4. 2932	4 17 36	4. 2845	4 17 04	37
38	4. 3155	4 18 56	4. 3069	4 18 25	4. 2981	4 17 53	4. 2894	4 17 22	38
39	4. 3206	4 19 14	4. 3119	4 18 43	4. 3032	4 18 11	4. 2945	4 17 40	39
40	4. 3255	4 19 32	4. 3169	4 19 01	4. 3081	4 18 29	4. 2994	4 17 58	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$7^h\ 54^m\ 00^s$		$7^h\ 54^m\ 30^s$		$7^h\ 55^m\ 00^s$		$7^h\ 55^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	4. 1046	4 06 17	4. 0962	4 05 46	4. 0879	4 05 16	4. 0795	4 04 46	1
2	4. 1092	4 06 33	4. 1007	4 06 02	4. 0924	4 05 33	4. 0840	4 05 02	2
3	4. 1138	4 06 50	4. 1054	4 06 19	4. 0970	4 05 49	4. 0886	4 05 19	3
4	4. 1183	4 07 06	4. 1099	4 06 36	4. 1015	4 06 06	4. 0932	4 05 36	4
5	4. 1230	4 07 23	4. 1145	4 06 52	4. 1062	4 06 22	4. 0978	4 05 52	5
6	4. 1275	4 07 39	4. 1191	4 07 09	4. 1107	4 06 39	4. 1023	4 06 08	6
7	4. 1322	4 07 56	4. 1237	4 07 25	4. 1154	4 06 55	4. 1070	4 06 25	7
8	4. 1369	4 08 13	4. 1284	4 07 42	4. 1200	4 07 12	4. 1116	4 06 42	8
9	4. 1418	4 08 30	4. 1329	4 07 58	4. 1246	4 07 29	4. 1161	4 06 58	9
10	4. 1460	4 08 46	4. 1376	4 08 15	4. 1293	4 07 45	4. 1208	4 07 15	10
11	4. 1509	4 09 03	4. 1423	4 08 32	4. 1339	4 08 02	4. 1255	4 07 32	11
12	4. 1555	4 09 20	4. 1470	4 08 49	4. 1385	4 08 19	4. 1301	4 07 48	12
13	4. 1602	4 09 37	4. 1516	4 09 06	4. 1433	4 08 36	4. 1347	4 08 05	13
14	4. 1648	4 09 53	4. 1563	4 09 23	4. 1479	4 08 52	4. 1394	4 08 22	14
15	4. 1695	4 10 10	4. 1610	4 09 40	4. 1526	4 09 09	4. 1441	4 08 39	15
16	4. 1743	4 10 27	4. 1657	4 09 57	4. 1573	4 09 26	4. 1488	4 08 56	16
17	4. 1790	4 10 44	4. 1704	4 10 13	4. 1620	4 09 43	4. 1535	4 09 13	17
18	4. 1837	4 11 01	4. 1751	4 10 30	4. 1667	4 10 00	4. 1582	4 09 30	18
19	4. 1884	4 11 18	4. 1798	4 10 47	4. 1714	4 10 17	4. 1628	4 09 46	19
20	4. 1933	4 11 36	4. 1846	4 11 05	4. 1762	4 10 34	4. 1676	4 10 03	20
21	4. 1980	4 11 53	4. 1894	4 11 22	4. 1809	4 10 51	4. 1724	4 10 21	21
22	4. 2028	4 12 10	4. 1942	4 11 39	4. 1857	4 11 09	4. 1772	4 10 38	22
23	4. 2075	4 12 27	4. 1989	4 11 56	4. 1905	4 11 26	4. 1819	4 10 55	23
24	4. 2124	4 12 45	4. 2038	4 12 14	4. 1953	4 11 43	4. 1868	4 11 12	24
25	4. 2172	4 13 02	4. 2085	4 12 31	4. 2000	4 12 00	4. 1914	4 11 29	25
26	4. 2220	4 13 19	4. 2134	4 12 48	4. 2048	4 12 17	4. 1962	4 11 46	26
27	4. 2269	4 13 37	4. 2182	4 13 06	4. 2097	4 12 35	4. 2011	4 12 04	27
28	4. 2316	4 13 54	4. 2232	4 13 24	4. 2145	4 12 52	4. 2058	4 12 21	28
29	4. 2365	4 14 11	4. 2279	4 13 40	4. 2193	4 13 09	4. 2106	4 12 38	29
30	4. 2414	4 14 29	4. 2327	4 13 58	4. 2242	4 13 27	4. 2155	4 12 56	30
31	4. 2463	4 14 47	4. 2376	4 14 15	4. 2290	4 13 44	4. 2204	4 13 13	31
32	4. 2512	4 15 04	4. 2425	4 14 33	4. 2339	4 14 02	4. 2252	4 13 31	32
33	4. 2561	4 15 22	4. 2474	4 14 51	4. 2388	4 14 20	4. 2301	4 13 48	33
34	4. 2610	4 15 40	4. 2523	4 15 08	4. 2436	4 14 37	4. 2350	4 14 06	34
35	4. 2659	4 15 57	4. 2572	4 15 26	4. 2485	4 14 55	4. 2398	4 14 23	35
36	4. 2709	4 16 15	4. 2622	4 15 44	4. 2535	4 15 13	4. 2448	4 14 41	36
37	4. 2758	4 16 33	4. 2671	4 16 02	4. 2583	4 15 30	4. 2496	4 14 59	37
38	4. 2807	4 16 51	4. 2720	4 16 19	4. 2633	4 15 48	4. 2546	4 15 17	38
39	4. 2858	4 17 09	4. 2770	4 16 37	4. 2684	4 15 06	4. 2596	4 15 35	39
40	4. 2907	4 17 27	4. 2819	4 16 55	4. 2733	4 16 24	4. 2645	4 15 52	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$7^h\ 56^m\ 00^s$		$7^h\ 56^m\ 30^s$		$7^h\ 57^m\ 00^s$		$7^h\ 57^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	4. 0712	4 04 16	4. 0628	4 03 46	4. 0545	4 03 16	4. 0461	4 02 46	1
2	4. 0757	4 04 33	4. 0674	4 04 02	4. 0590	4 03 33	4. 0506	4 03 02	2
3	4. 0803	4 04 49	4. 0719	4 04 19	4. 0636	4 03 49	4. 0552	4 03 19	3
4	4. 0848	4 05 05	4. 0765	4 04 36	4. 0681	4 04 05	4. 0596	4 03 35	4
5	4. 0894	4 05 22	4. 0810	4 04 52	4. 0727	4 04 22	4. 0643	4 03 51	5
6	4. 0939	4 05 38	4. 0855	4 05 08	4. 0772	4 04 38	4. 0687	4 04 07	6
7	4. 0985	4 05 54	4. 0902	4 05 25	4. 0818	4 04 54	4. 0734	4 04 24	7
8	4. 1032	4 06 12	4. 0948	4 05 41	4. 0864	4 05 11	4. 0779	4 04 40	8
9	4. 1077	4 06 28	4. 0993	4 05 57	4. 0909	4 05 27	4. 0825	4 04 57	9
10	4. 1125	4 06 45	4. 1039	4 06 14	4. 0955	4 05 44	4. 0871	4 05 14	10
11	4. 1170	4 07 01	4. 1085	4 06 30	4. 1002	4 06 01	4. 0916	4 05 30	11
12	4. 1216	4 07 18	4. 1132	4 06 48	4. 1048	4 06 17	4. 0963	4 05 47	12
13	4. 1263	4 07 35	4. 1178	4 07 04	4. 1094	4 06 34	4. 1009	4 06 03	13
14	4. 1309	4 07 51	4. 1225	4 07 21	4. 1141	4 06 51	4. 1055	4 06 20	14
15	4. 1356	4 08 08	4. 1272	4 07 38	4. 1187	4 07 07	4. 1102	4 06 37	15
16	4. 1403	4 08 25	4. 1318	4 07 54	4. 1234	4 07 24	4. 1148	4 06 53	16
17	4. 1450	4 08 43	4. 1365	4 08 11	4. 1280	4 07 41	4. 1195	4 07 10	17
18	4. 1496	4 08 59	4. 1411	4 08 28	4. 1326	4 07 57	4. 1241	4 07 27	18
19	4. 1543	4 09 15	4. 1458	4 08 45	4. 1373	4 08 14	4. 1288	4 07 43	19
20	4. 1591	4 09 33	4. 1506	4 09 02	4. 1421	4 08 32	4. 1335	4 08 01	20
21	4. 1638	4 09 49	4. 1553	4 09 19	4. 1468	4 08 48	4. 1382	4 08 18	21
22	4. 1686	4 10 07	4. 1601	4 09 36	4. 1515	4 09 05	4. 1430	4 08 35	22
23	4. 1733	4 10 24	4. 1647	4 09 53	4. 1562	4 09 22	4. 1476	4 08 51	23
24	4. 1781	4 10 41	4. 1695	4 10 10	4. 1610	4 09 40	4. 1524	4 09 09	24
25	4. 1828	4 10 58	4. 1743	4 10 27	4. 1657	4 09 57	4. 1571	4 09 26	25
26	4. 1876	4 11 15	4. 1791	4 10 45	4. 1705	4 10 14	4. 1619	4 09 43	26
27	4. 1925	4 11 33	4. 1839	4 11 02	4. 1753	4 10 31	4. 1667	4 10 00	27
28	4. 1972	4 11 50	4. 1886	4 11 19	4. 1800	4 10 48	4. 1714	4 10 17	28
29	4. 2020	4 12 07	4. 1935	4 11 37	4. 1848	4 11 05	4. 1762	4 10 34	29
30	4. 2069	4 12 25	4. 1983	4 11 54	4. 1897	4 11 23	4. 1810	4 10 52	30
31	4. 2117	4 12 42	4. 2031	4 12 11	4. 1945	4 11 40	4. 1858	4 11 09	31
32	4. 2166	4 13 00	4. 2079	4 12 28	4. 1993	4 11 57	4. 1906	4 11 26	32
33	4. 2216	4 13 18	4. 2128	4 12 46	4. 2042	4 12 15	4. 1955	4 11 44	33
34	4. 2263	4 13 35	4. 2176	4 13 03	4. 2090	4 12 32	4. 2003	4 12 01	34
35	4. 2312	4 13 52	4. 2225	4 13 21	4. 2139	4 12 50	4. 2051	4 12 18	35
36	4. 2361	4 14 10	4. 2275	4 13 39	4. 2188	4 13 07	4. 2101	4 12 37	36
37	4. 2410	4 14 28	4. 2323	4 13 56	4. 2237	4 13 25	4. 2149	4 12 54	37
38	4. 2459	4 14 45	4. 2372	4 14 14	4. 2286	4 13 43	4. 2198	4 13 12	38
39	4. 2509	4 15 03	4. 2422	4 14 32	4. 2335	4 14 01	4. 2247	4 13 29	39
40	4. 2558	4 15 21	4. 2471	4 14 50	4. 2384	4 14 18	4. 2296	4 13 47	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$7^h\ 58^m\ 00^s$		$7^h\ 58^m\ 30^s$		$7^h\ 59^m\ 00^s$		$7^h\ 59^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	4. 0378	4 02 16	4. 0295	4 01 46	4. 0212	4 01 16	4. 0128	4 00 46	1
2	4. 0423	4 02 32	4. 0339	4 02 02	4. 0256	4 01 32	4. 0173	4 01 02	2
3	4. 0469	4 02 49	4. 0385	4 02 18	4. 0301	4 01 48	4. 0218	4 01 18	3
4	4. 0514	4 03 05	4. 0430	4 02 35	4. 0346	4 02 05	4. 0263	4 01 35	4
5	4. 0559	4 03 21	4. 0475	4 02 51	4. 0392	4 02 21	4. 0308	4 01 51	5
6	4. 0604	4 03 37	4. 0520	4 03 07	4. 0436	4 02 37	4. 0353	4 02 07	6
7	4. 0650	4 03 55	4. 0565	4 03 23	4. 0482	4 02 54	4. 0398	4 02 23	7
8	4. 0696	4 04 11	4. 0612	4 03 40	4. 0527	4 03 10	4. 0444	4 02 40	8
9	4. 0741	4 04 27	4. 0656	4 03 56	4. 0572	4 03 26	4. 0488	4 02 55	9
10	4. 0787	4 04 43	4. 0703	4 04 13	4. 0618	4 03 42	4. 0534	4 03 12	10
11	4. 0833	4 05 00	4. 0748	4 04 29	4. 0664	4 03 59	4. 0580	4 03 29	11
12	4. 0879	4 05 16	4. 0795	4 04 46	4. 0711	4 04 16	4. 0625	4 03 45	12
13	4. 0925	4 05 33	4. 0840	4 05 02	4. 0756	4 04 32	4. 0672	4 04 02	13
14	4. 0971	4 05 50	4. 0886	4 05 19	4. 0802	4 04 49	4. 0717	4 04 18	14
15	4. 1015	4 06 05	4. 0933	4 05 36	4. 0848	4 05 06	4. 0764	4 04 35	15
16	4. 1064	4 06 23	4. 0979	4 05 52	4. 0894	4 05 22	4. 0809	4 04 51	16
17	4. 1110	4 06 40	4. 1025	4 06 09	4. 0940	4 05 38	4. 0855	4 05 08	17
18	4. 1156	4 06 56	4. 1072	4 06 26	4. 0986	4 05 55	4. 0902	4 05 25	18
19	4. 1203	4 07 13	4. 1118	4 06 42	4. 1033	4 06 12	4. 0948	4 05 41	19
20	4. 1251	4 07 30	4. 1165	4 06. 59	4. 1080	4 06 29	4. 0995	4 05 58	20
21	4. 1297	4 07 47	4. 1212	4 07 16	4. 1126	4 06 45	4. 1041	4 06 15	21
22	4. 1345	4 08 04	4. 1259	4 07 33	4. 1174	4 07 03	4. 1088	4 06 31	22
23	4. 1391	4 08 21	4. 1305	4 07 50	4. 1220	4 07 19	4. 1135	4 06 49	23
24	4. 1439	4 08 38	4. 1353	4 08 07	4. 1268	4 07 36	4. 1182	4 07 06	24
25	4. 1486	4 08 55	4. 1400	4 08 24	4. 1314	4 07 53	4. 1229	4 07 22	25
26	4. 1534	4 09 12	4. 1448	4 08 41	4. 1362	4 08 10	4. 1276	4 07 39	26
27	4. 1582	4 09 30	4. 1496	4 08 59	4. 1409	4 08 27	4. 1324	4 07 57	27
28	4. 1628	4 09 46	4. 1542	4 09 15	4. 1456	4 08 44	4. 1370	4 08 14	28
29	4. 1676	4 10 03	4. 1590	4 09 32	4. 1504	4 09 01	4. 1418	4 08 30	29
30	4. 1725	4 10 21	4. 1638	4 09 49	4. 1552	4 09 19	4. 1466	4 08 48	30
31	4. 1773	4 10 38	4. 1686	4 10 07	4. 1600	4 09 36	4. 1514	4 09 05	31
32	4. 1821	4 10 56	4. 1734	4 10 24	4. 1647	4 09 53	4. 1561	4 09 22	32
33	4. 1869	4 11 13	4. 1782	4 10 41	4. 1695	4 10 10	4. 1609	4 09 39	33
34	4. 1917	4 11 30	4. 1830	4 10 59	4. 1744	4 10 28	4. 1657	4 09 56	34
35	4. 1965	4 11 47	4. 1878	4 11 16	4. 1792	4 10 45	4. 1705	4 10 14	35
36	4. 2015	4 12 05	4. 1928	4 11 34	4. 1841	4 11 03	4. 1754	4 10 31	36
37	4. 2063	4 12 23	4. 1976	4 11 51	4. 1889	4 11 20	4. 1802	4 10 49	37
38	4. 2111	4 12 40	4. 2024	4 12 09	4. 1937	4 11 37	4. 1850	4 11 06	38
39	4. 2161	4 12 58	4. 2074	4 12 27	4. 1986	4 11 55	4. 1900	4 11 24	39
40	4. 2209	4 13 15	4. 2122	4 12 44	4. 2035	4 12 13	4. 1948	4 11 41	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	8h 00m 00s		8h 00m 30s		8h 01m 00s		8h 01m 30s		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	4. 0045	4 00 16	3. 9961	3 59 46	3. 9877	3 59 16	3. 9795	3 58 46	1
2	4. 0088	4 00 31	4. 0005	4 00 02	3. 9922	3 59 32	3. 9838	3 59 01	2
3	4. 0134	4 00 48	4. 0051	4 00 18	3. 9967	3 59 48	3. 9883	3 59 18	3
4	4. 0178	4 01 04	4. 0095	4 00 34	4. 0011	4 00 04	3. 9927	3 59 34	4
5	4. 0224	4 01 21	4. 0140	4 00 50	4. 0056	4 00 20	3. 9973	3 59 50	5
6	4. 0268	4 01 36	4. 0185	4 01 06	4. 0101	4 00 36	4. 0016	4 00 06	6
7	4. 0314	4 01 53	4. 0229	4 01 22	4. 0146	4 00 53	4. 0062	4 00 22	7
8	4. 0359	4 02 09	4. 0275	4 01 39	4. 0191	4 01 09	4. 0107	4 00 39	8
9	4. 0404	4 02 25	4. 0320	4 01 55	4. 0235	4 01 25	4. 0151	4 00 54	9
10	4. 0449	4 02 42	4. 0365	4 02 11	4. 0281	4 01 41	4. 0196	4 01 10	10
11	4. 0495	4 02 58	4. 0411	4 02 28	4. 0326	4 01 57	4. 0242	4 01 27	11
12	4. 0541	4 03 15	4. 0456	4 02 44	4. 0372	4 02 14	4. 0287	4 01 43	12
13	4. 0586	4 03 31	4. 0502	4 03 01	4. 0417	4 02 30	4. 0333	4 02 00	13
14	4. 0632	4 03 48	4. 0548	4 03 17	4. 0463	4 02 47	4. 0378	4 02 16	14
15	4. 0678	4 04 04	4. 0594	4 03 34	4. 0509	4 03 03	4. 0424	4 02 33	15
16	4. 0724	4 04 21	4. 0640	4 03 50	4. 0555	4 03 20	4. 0470	4 02 49	16
17	4. 0770	4 04 37	4. 0685	4 04 06	4. 0600	4 03 36	4. 0515	4 03 05	17
18	4. 0816	4 04 54	4. 0732	4 04 24	4. 0646	4 03 53	4. 0561	4 03 22	18
19	4. 0862	4 05 10	4. 0779	4 04 40	4. 0692	4 04 09	4. 0607	4 03 39	19
20	4. 0909	4 05 27	4. 0825	4 04 57	4. 0739	4 04 26	4. 0654	4 03 55	20
21	4. 0955	4 05 44	4. 0871	4 05 14	4. 0785	4 04 42	4. 0700	4 04 12	21
22	4. 1003	4 06 01	4. 0917	4 05 30	4. 0832	4 05 00	4. 0746	4 04 29	22
23	4. 1049	4 06 18	4. 0964	4 05 47	4. 0878	4 05 16	4. 0793	4 04 45	23
24	4. 1096	4 06 35	4. 1011	4 06 04	4. 0925	4 05 33	4. 0838	4 05 01	24
25	4. 1143	4 06 51	4. 1057	4 06 21	4. 0971	4 05 50	4. 0885	4 05 18	25
26	4. 1190	4 07 08	4. 1105	4 06 38	4. 1018	4 06 06	4. 0933	4 05 36	26
27	4. 1237	4 07 25	4. 1152	4 06 55	4. 1066	4 06 24	4. 0980	4 05 53	27
28	4. 1285	4 07 42	4. 1198	4 07 11	4. 1112	4 06 40	4. 1026	4 06 09	28
29	4. 1331	4 07 59	4. 1246	4 07 29	4. 1159	4 06 57	4. 1074	4 06 27	29
30	4. 1379	4 08 16	4. 1294	4 07 46	4. 1207	4 07 15	4. 1121	4 06 44	30
31	4. 1427	4 08 34	4. 1341	4 08 03	4. 1255	4 07 32	4. 1168	4 07 00	31
32	4. 1475	4 08 51	4. 1388	4 08 19	4. 1302	4 07 49	4. 1215	4 07 17	32
33	4. 1522	4 09 08	4. 1436	4 08 37	4. 1349	4 08 06	4. 1263	4 07 35	33
34	4. 1570	4 09 25	4. 1484	4 08 54	4. 1397	4 08 23	4. 1310	4 07 52	34
35	4. 1618	4 09 42	4. 1532	4 09 12	4. 1445	4 08 40	4. 1358	4 08 09	35
36	4. 1667	4 10 00	4. 1581	4 09 29	4. 1493	4 08 57	4. 1406	4 08 26	36
37	4. 1715	4 10 17	4. 1628	4 09 46	4. 1541	4 09 15	4. 1454	4 08 43	37
38	4. 1763	4 10 35	4. 1676	4 10 03	4. 1589	4 09 32	4. 1502	4 09 01	38
39	4. 1812	4 10 52	4. 1725	4 10 21	4. 1638	4 09 49	4. 1551	4 09 18	39
40	4. 1860	4 11 10	4. 1774	4 10 39	4. 1686	4 10 07	4. 1599	4 09 36	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$8^h\ 02^m\ 00^s$		$8^h\ 02^m\ 30^s$		$8^h\ 03^m\ 00^s$		$8^h\ 03^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	3.9711	3 58 16	3.9627	3 57 46	3.9544	3 57 16	3.9460	3 56 46	1
2	3.9755	3 58 32	3.9671	3 58 02	3.9587	3 57 31	3.9504	3 57 01	2
3	3.9800	3 58 48	3.9715	3 58 17	3.9633	3 57 48	3.9548	3 57 17	3
4	3.9844	3 59 04	3.9759	3 58 33	3.9676	3 58 03	3.9592	3 57 33	4
5	3.9889	3 59 20	3.9805	3 58 50	3.9721	3 58 20	3.9637	3 57 49	5
6	3.9933	3 59 36	3.9848	3 59 05	3.9765	3 58 35	3.9681	3 58 05	6
7	3.9978	3 59 52	3.9894	3 59 22	3.9810	3 58 52	3.9725	3 58 21	7
8	4.0023	4 00 08	3.9938	3 59 37	3.9855	3 59 08	3.9770	3 58 38	8
9	4.0067	4 00 24	3.9983	3 59 54	3.9899	3 59 24	3.9815	3 58 53	9
10	4.0113	4 00 41	4.0027	4 00 10	3.9944	3 59 40	3.9859	3 59 09	10
11	4.0158	4 00 57	4.0073	4 00 26	3.9989	3 59 56	3.9905	3 59 26	11
12	4.0203	4 01 13	4.0118	4 00 42	4.0034	4 00 12	3.9949	3 59 42	12
13	4.0248	4 01 29	4.0164	4 00 59	4.0079	4 00 28	3.9995	3 59 58	13
14	4.0294	4 01 46	4.0209	4 01 15	4.0125	4 00 45	4.0040	4 00 14	14
15	4.0339	4 02 02	4.0254	4 01 31	4.0170	4 01 02	4.0085	4 00 30	15
16	4.0385	4 02 18	4.0299	4 01 48	4.0215	4 01 17	4.0130	4 00 47	16
17	4.0431	4 02 35	4.0345	4 02 04	4.0261	4 01 34	4.0175	4 01 03	17
18	4.0476	4 02 51	4.0391	4 02 21	4.0306	4 01 50	4.0221	4 01 20	18
19	4.0522	4 03 08	4.0436	4 02 37	4.0352	4 02 07	4.0268	4 01 36	19
20	4.0568	4 03 24	4.0483	4 02 54	4.0398	4 02 23	4.0313	4 01 53	20
21	4.0615	4 03 41	4.0528	4 03 10	4.0444	4 02 40	4.0358	4 02 09	21
22	4.0661	4 03 58	4.0575	4 03 27	4.0490	4 02 57	4.0405	4 02 26	22
23	4.0707	4 04 15	4.0621	4 03 44	4.0536	4 03 13	4.0450	4 02 42	23
24	4.0754	4 04 31	4.0668	4 04 00	4.0583	4 03 30	4.0496	4 02 59	24
25	4.0800	4 04 48	4.0714	4 04 17	4.0628	4 03 46	4.0543	4 03 15	25
26	4.0847	4 05 05	4.0761	4 04 34	4.0675	4 04 03	4.0589	4 03 32	26
27	4.0894	4 05 22	4.0807	4 04 51	4.0722	4 04 20	4.0635	4 03 49	27
28	4.0940	4 05 38	4.0854	4 05 07	4.0768	4 04 36	4.0682	4 04 06	28
29	4.0987	4 05 55	4.0901	4 05 24	4.0815	4 04 53	4.0729	4 04 22	29
30	4.1035	4 06 13	4.0948	4 05 41	4.0862	4 05 10	4.0775	4 04 39	30
31	4.1082	4 06 30	4.0995	4 05 58	4.0909	4 05 27	4.0823	4 04 56	31
32	4.1129	4 06 46	4.1042	4 06 15	4.0956	4 05 44	4.0870	4 05 14	32
33	4.1176	4 07 03	4.1089	4 06 32	4.1004	4 06 01	4.0916	4 05 30	33
34	4.1224	4 07 21	4.1137	4 06 49	4.1051	4 06 18	4.0964	4 05 47	34
35	4.1272	4 07 38	4.1184	4 07 06	4.1098	4 06 35	4.1011	4 06 04	35
36	4.1320	4 07 55	4.1232	4 07 24	4.1146	4 06 53	4.1059	4 06 21	36
37	4.1367	4 08 12	4.1279	4 07 40	4.1194	4 07 10	4.1106	4 06 38	37
38	4.1415	4 08 29	4.1327	4 07 58	4.1241	4 07 27	4.1154	4 06 56	38
39	4.1464	4 08 47	4.1376	4 08 15	4.1290	4 07 44	4.1202	4 07 13	39
40	4.1512	4 09 04	4.1424	4 08 33	4.1337	4 08 01	4.1250	4 07 30	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$8^h\ 04^m\ 00^s$		$8^h\ 04^m\ 30^s$		$8^h\ 05^m\ 00^s$		$8^h\ 05^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	3.9376	3 56 15	3.9294	3 55 46	3.9210	3 55 16	3.9127	3 54 46	1
2	3.9420	3 56 32	3.9337	3 56 01	3.9254	3 55 31	3.9171	3 55 02	2
3	3.9465	3 56 47	3.9381	3 56 17	3.9298	3 55 47	3.9215	3 55 17	3
4	3.9508	3 57 03	3.9425	3 56 33	3.9342	3 56 03	3.9258	3 55 33	4
5	3.9553	3 57 19	3.9469	3 56 49	3.9385	3 56 18	3.9303	3 55 49	5
6	3.9596	3 57 35	3.9513	3 57 05	3.9429	3 56 34	3.9346	3 56 05	6
7	3.9642	3 57 51	3.9557	3 57 21	3.9474	3 56 51	3.9390	3 56 20	7
8	3.9686	3 58 07	3.9602	3 57 37	3.9518	3 57 06	3.9435	3 56 37	8
9	3.9730	3 58 23	3.9646	3 57 53	3.9562	3 57 22	3.9478	3 56 52	9
10	3.9774	3 58 39	3.9691	3 58 09	3.9606	3 57 38	3.9523	3 57 08	10
11	3.9820	3 58 55	3.9735	3 58 25	3.9652	3 57 55	3.9567	3 57 24	11
12	3.9865	3 59 11	3.9781	3 58 41	3.9696	3 58 11	3.9613	3 57 41	12
13	3.9910	3 59 28	3.9825	3 58 57	3.9741	3 58 27	3.9657	3 57 57	13
14	3.9956	3 59 44	3.9870	3 59 13	3.9786	3 58 43	3.9702	3 58 13	14
15	4.0000	4 00 00	3.9915	3 59 29	3.9831	3 58 59	3.9746	3 58 29	15
16	4.0045	4 00 16	3.9960	3 59 46	3.9875	3 59 15	3.9792	3 58 45	16
17	4.0090	4 00 32	4.0005	4 00 02	3.9921	3 59 32	3.9836	3 59 01	17
18	4.0135	4 00 49	4.0051	4 00 18	3.9966	3 59 48	3.9877	3 59 16	18
19	4.0181	4 01 05	4.0096	4 00 35	4.0011	4 00 04	3.9926	3 59 33	19
20	4.0227	4 01 22	4.0142	4 00 51	4.0055	4 00 20	3.9973	3 59 50	20
21	4.0273	4 01 38	4.0187	4 01 07	4.0103	4 00 37	4.0017	4 00 06	21
22	4.0319	4 01 55	4.0234	4 01 24	4.0148	4 00 53	4.0064	4 00 23	22
23	4.0365	4 02 11	4.0279	4 01 40	4.0194	4 01 10	4.0109	4 00 39	23
24	4.0411	4 02 28	4.0325	4 01 57	4.0240	4 01 26	4.0155	4 00 56	24
25	4.0456	4 02 44	4.0371	4 02 14	4.0285	4 01 42	4.0200	4 01 12	25
26	4.0503	4 03 01	4.0417	4 02 30	4.0332	4 02 00	4.0246	4 01 29	26
27	4.0550	4 03 18	4.0464	4 02 47	4.0378	4 02 16	4.0293	4 01 45	27
28	4.0595	4 03 34	4.0510	4 03 04	4.0424	4 02 33	4.0338	4 02 01	28
29	4.0643	4 03 51	4.0556	4 03 20	4.0471	4 02 50	4.0385	4 02 18	29
30	4.0689	4 04 08	4.0603	4 03 37	4.0517	4 03 06	4.0432	4 02 36	30
31	4.0736	4 04 25	4.0650	4 03 54	4.0564	4 03 23	4.0478	4 02 52	31
32	4.0783	4 04 42	4.0697	4 04 11	4.0611	4 03 40	4.0525	4 03 09	32
33	4.0830	4 04 59	4.0744	4 04 28	4.0657	4 03 57	4.0571	4 03 26	33
34	4.0877	4 05 16	4.0791	4 04 45	4.0705	4 04 14	4.0618	4 03 42	34
35	4.0924	4 05 33	4.0837	4 05 01	4.0751	4 04 30	4.0665	4 03 59	35
36	4.0972	4 05 50	4.0885	4 05 18	4.0799	4 04 48	4.0713	4 04 17	36
37	4.1019	4 06 07	4.0933	4 05 36	4.0846	4 05 05	4.0760	4 04 34	37
38	4.1067	4 06 24	4.0980	4 05 53	4.0893	4 05 21	4.0806	4 04 50	38
39	4.1115	4 06 41	4.1028	4 06 10	4.0941	4 05 39	4.0855	4 05 08	39
40	4.1162	4 06 58	4.1075	4 06 27	4.0988	4 05 55	4.0902	4 05 25	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$8^h\ 06^m\ 00^s$		$8^h\ 06^m\ 30^s$		$8^h\ 07^m\ 00^s$		$8^h\ 07^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	3.9044	3 54 16	3.8960	3 53 46	3.8876	3 53 15	3.8793	3 52 45	1
2	3.9087	3 54 31	3.9004	3 54 01	3.8920	3 53 31	3.8835	3 53 01	2
3	3.9131	3 54 47	3.9047	3 54 17	3.8964	3 53 47	3.8879	3 53 16	3
4	3.9175	3 55 03	3.9090	3 54 32	3.9006	3 54 02	3.8923	3 53 32	4
5	3.9218	3 55 18	3.9135	3 54 49	3.9051	3 54 18	3.8966	3 53 48	5
6	3.9262	3 55 34	3.9178	3 55 04	3.9094	3 54 34	3.9009	3 54 03	6
7	3.9306	3 55 50	3.9222	3 55 20	3.9138	3 54 49	3.9054	3 54 19	7
8	3.9351	3 56 06	3.9266	3 55 36	3.9183	3 55 06	3.9097	3 54 35	8
9	3.9394	3 56 22	3.9310	3 55 52	3.9225	3 55 21	3.9141	3 54 51	9
10	3.9438	3 56 37	3.9355	3 56 08	3.9270	3 55 37	3.9186	3 55 07	10
11	3.9483	3 56 54	3.9398	3 56 23	3.9315	3 55 53	3.9230	3 55 23	11
12	3.9527	3 57 10	3.9443	3 56 39	3.9358	3 56 09	3.9274	3 55 39	12
13	3.9572	3 57 26	3.9487	3 56 55	3.9403	3 56 25	3.9318	3 55 54	13
14	3.9617	3 57 42	3.9532	3 57 12	3.9447	3 56 41	3.9362	3 56 10	14
15	3.9662	3 57 58	3.9576	3 57 27	3.9492	3 56 57	3.9406	3 56 26	15
16	3.9706	3 58 14	3.9622	3 57 44	3.9536	3 57 13	3.9451	3 56 43	16
17	3.9751	3 58 30	3.9666	3 58 00	3.9581	3 57 29	3.9495	3 56 58	17
18	3.9796	3 58 47	3.9711	3 58 16	3.9626	3 57 45	3.9540	3 57 14	18
19	3.9841	3 59 03	3.9755	3 58 32	3.9671	3 58 02	3.9585	3 57 30	19
20	3.9887	3 59 19	3.9802	3 58 49	3.9716	3 58 18	3.9631	3 57 47	20
21	3.9932	3 59 36	3.9846	3 59 05	3.9761	3 58 34	3.9675	3 58 03	21
22	3.9978	3 59 52	3.9893	3 59 21	3.9807	3 58 51	3.9721	3 58 20	22
23	4.0023	4 00 08	3.9937	3 59 37	3.9852	3 59 07	3.9765	3 58 35	23
24	4.0069	4 00 25	3.9984	3 59 54	3.9898	3 59 23	3.9812	3 58 52	24
25	4.0115	4 00 41	4.0028	4 00 10	3.9943	3 59 39	3.9856	3 59 08	25
26	4.0161	4 00 58	4.0075	4 00 27	3.9989	3 59 56	3.9903	3 59 25	26
27	4.0207	4 01 15	4.0121	4 00 44	4.0035	4 00 13	3.9948	3 59 41	27
28	4.0252	4 01 31	4.0166	4 01 00	4.0080	4 00 29	3.9994	3 59 58	28
29	4.0298	4 01 48	4.0213	4 01 17	4.0126	4 00 45	4.0040	4 00 14	29
30	4.0345	4 02 04	4.0259	4 01 33	4.0173	4 01 02	4.0085	4 00 30	30
31	4.0392	4 02 21	4.0305	4 01 50	4.0219	4 01 19	4.0132	4 00 48	31
32	4.0438	4 02 37	4.0352	4 02 07	4.0265	4 01 35	4.0178	4 01 04	32
33	4.0485	4 02 54	4.0398	4 02 23	4.0312	4 01 52	4.0225	4 01 21	33
34	4.0531	4 03 11	4.0445	4 02 40	4.0358	4 02 09	4.0271	4 01 38	34
35	4.0578	4 03 28	4.0491	4 02 57	4.0405	4 02 26	4.0317	4 01 54	35
36	4.0625	4 03 45	4.0539	4 03 14	4.0452	4 02 43	4.0365	4 02 11	36
37	4.0673	4 04 02	4.0585	4 03 30	4.0498	4 02 59	4.0411	4 02 28	37
38	4.0719	4 04 19	4.0632	4 03 48	4.0545	4 03 16	4.0457	4 02 45	38
39	4.0767	4 04 36	4.0680	4 04 05	4.0593	4 03 33	4.0505	4 03 02	39
40	4.0814	4 04 53	4.0727	4 04 22	4.0640	4 03 50	4.0552	4 03 19	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$8^h\ 08^m\ 00^s$		$8^h\ 08^m\ 30^s$		$8^h\ 09^m\ 00^s$		$8^h\ 09^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	3.8710	3 52 16	3.8626	3 51 45	3.8543	3 51 15	3.8459	3 50 45	1
2	3.8753	3 52 31	3.8669	3 52 01	3.8585	3 51 30	3.8502	3 51 02	2
3	3.8796	3 52 47	3.8713	3 52 17	3.8629	3 51 46	3.8545	3 51 16	3
4	3.8839	3 53 02	3.8755	3 52 32	3.8672	3 52 02	3.8588	3 51 31	4
5	3.8883	3 53 18	3.8799	3 52 48	3.8715	3 52 17	3.8632	3 51 48	5
6	3.8926	3 53 33	3.8842	3 53 03	3.8758	3 52 33	3.8675	3 52 03	6
7	3.8970	3 53 49	3.8885	3 53 18	3.8802	3 52 49	3.8717	3 52 18	7
8	3.9014	3 54 05	3.8930	3 53 35	3.8845	3 53 04	3.8762	3 52 35	8
9	3.9057	3 54 21	3.8973	3 53 50	3.8888	3 53 19	3.8805	3 52 50	9
10	3.9101	3 54 37	3.9016	3 54 06	3.8933	3 53 36	3.8848	3 53 05	10
11	3.9145	3 54 52	3.9061	3 54 22	3.8976	3 53 51	3.8892	3 53 21	11
12	3.9189	3 55 08	3.9105	3 54 38	3.9020	3 54 07	3.8936	3 53 37	12
13	3.9234	3 55 24	3.9149	3 54 54	3.9065	3 54 23	3.8980	3 53 53	13
14	3.9278	3 55 40	3.9193	3 55 09	3.9108	3 54 39	3.9024	3 54 09	14
15	3.9323	3 55 56	3.9237	3 55 25	3.9153	3 54 55	3.9068	3 54 24	15
16	3.9366	3 56 12	3.9282	3 55 42	3.9196	3 55 11	3.9112	3 54 40	16
17	3.9411	3 56 28	3.9326	3 55 57	3.9241	3 55 27	3.9156	3 54 56	17
18	3.9455	3 56 44	3.9370	3 56 14	3.9285	3 55 42	3.9200	3 55 12	18
19	3.9500	3 57 00	3.9415	3 56 29	3.9330	3 55 59	3.9245	3 55 28	19
20	3.9545	3 57 16	3.9460	3 56 46	3.9375	3 56 15	3.9290	3 55 44	20
21	3.9590	3 57 32	3.9505	3 57 02	3.9419	3 56 31	3.9335	3 56 01	21
22	3.9636	3 57 49	3.9550	3 57 18	3.9465	3 56 47	3.9379	3 56 16	22
23	3.9681	3 58 05	3.9595	3 57 34	3.9509	3 57 03	3.9424	3 56 33	23
24	3.9726	3 58 21	3.9641	3 57 51	3.9555	3 57 20	3.9469	3 56 49	24
25	3.9771	3 58 38	3.9685	3 58 06	3.9599	3 57 36	3.9514	3 57 05	25
26	3.9817	3 58 54	3.9731	3 58 23	3.9645	3 57 52	3.9559	3 57 21	26
27	3.9863	3 59 11	3.9777	3 58 40	3.9691	3 58 09	3.9605	3 57 38	27
28	3.9908	3 59 27	3.9822	3 58 56	3.9735	3 58 25	3.9650	3 57 54	28
29	3.9954	3 59 43	3.9867	3 59 12	3.9782	3 58 42	3.9695	3 58 10	29
30	4.0000	4 00 00	3.9914	3 59 29	3.9827	3 58 58	3.9741	3 58 27	30
31	4.0046	4 00 17	3.9959	3 59 45	3.9873	3 59 14	3.9787	3 58 43	31
32	4.0092	4 00 33	4.0005	4 00 02	3.9919	3 59 31	3.9833	3 59 00	32
33	4.0138	4 00 49	4.0052	4 00 19	3.9965	3 59 47	3.9878	3 59 16	33
34	4.0185	4 01 06	4.0098	4 00 35	4.0011	4 00 04	3.9925	3 59 33	34
35	4.0231	4 01 23	4.0144	4 00 52	4.0057	4 00 21	3.9971	3 59 50	35
36	4.0278	4 01 40	4.0191	4 01 09	4.0105	4 00 38	4.0017	4 00 06	36
37	4.0325	4 01 57	4.0237	4 01 25	4.0150	4 00 54	4.0064	4 00 23	37
38	4.0371	4 02 14	4.0284	4 01 42	4.0196	4 01 11	4.0110	4 00 40	38
39	4.0418	4 02 30	4.0331	4 01 59	4.0244	4 01 28	4.0157	4 00 57	39
40	4.0465	4 02 47	4.0377	4 02 16	4.0290	4 01 45	4.0203	4 01 13	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$8^h\ 10^m\ 00^s$		$8^h\ 10^m\ 30^s$		$8^h\ 11^m\ 00^s$		$8^h\ 11^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	3.8376	3 50 15	3.8293	3 49 45	3.8209	3 49 15	3.8126	3 48 45	1
2	3.8418	3 50 30	3.8335	3 50 01	3.8252	3 49 31	3.8168	3 49 00	2
3	3.8462	3 50 46	3.8379	3 50 16	3.8295	3 49 46	3.8211	3 49 16	3
4	3.8505	3 51 02	3.8421	3 50 32	3.8337	3 50 01	3.8254	3 49 31	4
5	3.8548	3 51 17	3.8465	3 50 47	3.8381	3 50 17	3.8296	3 49 47	5
6	3.8591	3 51 33	3.8507	3 51 03	3.8423	3 50 32	3.8339	3 50 02	6
7	3.8634	3 51 48	3.8551	3 51 18	3.8466	3 50 48	3.8383	3 50 18	7
8	3.8677	3 52 04	3.8595	3 51 34	3.8510	3 51 04	3.8425	3 50 33	8
9	3.8720	3 52 19	3.8636	3 51 49	3.8553	3 51 19	3.8468	3 50 48	9
10	3.8764	3 52 35	3.8680	3 52 05	3.8596	3 51 35	3.8512	3 51 04	10
11	3.8808	3 52 51	3.8724	3 52 21	3.8639	3 51 50	3.8555	3 51 20	11
12	3.8852	3 53 07	3.8767	3 52 36	3.8683	3 52 06	3.8598	3 51 36	12
13	3.8895	3 53 22	3.8812	3 52 52	3.8726	3 52 21	3.8642	3 51 51	13
14	3.8939	3 53 38	3.8855	3 53 08	3.8770	3 52 37	3.8685	3 52 06	14
15	3.8984	3 53 54	3.8899	3 53 24	3.8815	3 52 53	3.8729	3 52 22	15
16	3.9027	3 54 10	3.8943	3 53 39	3.8858	3 53 09	3.8773	3 52 38	16
17	3.9072	3 54 26	3.8987	3 53 55	3.8902	3 53 25	3.8816	3 52 54	17
18	3.9115	3 54 41	3.9031	3 54 11	3.8945	3 53 40	3.8861	3 53 10	18
19	3.9160	3 54 58	3.9075	3 54 27	3.8990	3 53 56	3.8905	3 53 26	19
20	3.9205	3 55 14	3.9120	3 54 43	3.9035	3 54 13	3.8949	3 53 42	20
21	3.9249	3 55 30	3.9165	3 54 59	3.9079	3 54 28	3.8994	3 53 58	21
22	3.9295	3 55 46	3.9209	3 55 15	3.9124	3 54 45	3.9038	3 54 13	22
23	3.9339	3 56 02	3.9254	3 55 31	3.9168	3 55 00	3.9083	3 54 30	23
24	3.9384	3 56 18	3.9299	3 55 48	3.9213	3 55 17	3.9127	3 54 46	24
25	3.9428	3 56 34	3.9344	3 56 04	3.9257	3 55 33	3.9172	3 55 02	25
26	3.9474	3 56 51	3.9388	3 56 19	3.9303	3 55 49	3.9216	3 55 18	26
27	3.9519	3 57 07	3.9434	3 56 36	3.9348	3 56 05	3.9262	3 55 34	27
28	3.9564	3 57 23	3.9478	3 56 52	3.9392	3 56 21	3.9306	3 55 50	28
29	3.9610	3 57 40	3.9524	3 57 09	3.9437	3 56 37	3.9352	3 56 07	29
30	3.9655	3 57 56	3.9569	3 57 25	3.9483	3 56 54	3.9396	3 56 23	30
31	3.9701	3 58 12	3.9615	3 57 41	3.9528	3 57 10	3.9442	3 56 39	31
32	3.9746	3 58 29	3.9661	3 57 58	3.9574	3 57 27	3.9487	3 56 55	32
33	3.9793	3 58 45	3.9706	3 58 14	3.9620	3 57 43	3.9533	3 57 12	33
34	3.9838	3 59 01	3.9752	3 58 31	3.9665	3 57 59	3.9578	3 57 28	34
35	3.9884	3 59 18	3.9798	3 58 48	3.9711	3 58 16	3.9625	3 57 45	35
36	3.9931	3 59 35	3.9845	3 59 04	3.9757	3 58 33	3.9671	3 58 02	36
37	3.9977	3 59 52	3.9891	3 59 21	3.9804	3 58 49	3.9717	3 58 18	37
38	4.0023	4 00 08	3.9936	3 59 37	3.9849	3 59 06	3.9762	3 58 34	38
39	4.0070	4 00 25	3.9984	3 59 54	3.9896	3 59 23	3.9809	3 58 51	39
40	4.0116	4 00 42	4.0029	4 00 10	3.9942	3 59 39	3.9854	3 59 07	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$8^h\ 12^m\ 00^s$		$8^h\ 12^m\ 30^s$		$8^h\ 13^m\ 00^s$		$8^h\ 13^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	3.8043	3 48 15	3.7958	3 47 45	3.7875	3 47 15	3.7792	3 46 45	1
2	3.8085	3 48 30	3.8000	3 48 00	3.7917	3 47 30	3.7834	3 47 00	2
3	3.8128	3 48 46	3.8043	3 48 15	3.7960	3 47 46	3.7877	3 47 15	3
4	3.8170	3 49 01	3.8085	3 48 30	3.8002	3 48 01	3.7919	3 47 31	4
5	3.8213	3 49 17	3.8128	3 48 46	3.8045	3 48 16	3.7961	3 47 46	5
6	3.8256	3 49 32	3.8171	3 49 02	3.8087	3 48 31	3.8004	3 48 01	6
7	3.8299	3 49 48	3.8214	3 49 17	3.8130	3 48 47	3.8046	3 48 17	7
8	3.8341	3 50 03	3.8257	3 49 33	3.8173	3 49 02	3.8089	3 48 32	8
9	3.8384	3 50 18	3.8300	3 49 48	3.8216	3 49 18	3.8132	3 48 47	9
10	3.8427	3 50 34	3.8343	3 50 03	3.8259	3 49 33	3.8175	3 49 03	10
11	3.8471	3 50 50	3.8386	3 50 19	3.8302	3 49 49	3.8218	3 49 18	11
12	3.8514	3 51 05	3.8429	3 50 34	3.8345	3 50 04	3.8261	3 49 34	12
13	3.8558	3 51 21	3.8473	3 50 50	3.8389	3 50 20	3.8304	3 49 49	13
14	3.8601	3 51 37	3.8516	3 51 06	3.8432	3 50 36	3.8347	3 50 05	14
15	3.8645	3 51 52	3.8559	3 51 21	3.8475	3 50 51	3.8390	3 50 21	15
16	3.8689	3 52 08	3.8602	3 51 37	3.8518	3 51 06	3.8434	3 50 36	16
17	3.8733	3 52 24	3.8646	3 51 53	3.8562	3 51 22	3.8477	3 50 52	17
18	3.8777	3 52 40	3.8690	3 52 08	3.8606	3 51 38	3.8521	3 51 08	18
19	3.8821	3 52 56	3.8734	3 52 24	3.8650	3 51 54	3.8564	3 51 23	19
20	3.8865	3 53 11	3.8778	3 52 40	3.8694	3 52 10	3.8608	3 51 39	20
21	3.8909	3 53 27	3.8822	3 52 56	3.8738	3 52 25	3.8652	3 51 55	21
22	3.8953	3 53 43	3.8867	3 53 12	3.8782	3 52 42	3.8696	3 52 11	22
23	3.8997	3 53 59	3.8911	3 53 28	3.8827	3 52 58	3.8740	3 52 26	23
24	3.9041	3 54 15	3.8956	3 53 44	3.8871	3 53 14	3.8784	3 52 42	24
25	3.9086	3 54 31	3.9001	3 54 00	3.8915	3 53 29	3.8828	3 52 58	25
26	3.9131	3 54 47	3.9046	3 54 17	3.8960	3 53 46	3.8873	3 53 14	26
27	3.9176	3 55 03	3.9091	3 54 33	3.9004	3 54 02	3.8918	3 53 30	27
28	3.9220	3 55 19	3.9135	3 54 49	3.9049	3 54 18	3.8962	3 53 46	28
29	3.9265	3 55 35	3.9179	3 55 04	3.9093	3 54 33	3.9006	3 54 02	29
30	3.9310	3 55 62	3.9224	3 55 21	3.9138	3 54 49	3.9052	3 54 19	30
31	3.9355	3 56 08	3.9269	3 55 37	3.9183	3 55 06	3.9097	3 54 35	31
32	3.9401	3 56 24	3.9314	3 55 53	3.9228	3 55 22	3.9142	3 54 51	32
33	3.9446	3 56 41	3.9360	3 56 10	3.9274	3 55 39	3.9187	3 55 07	33
34	3.9492	3 56 57	3.9405	3 56 26	3.9319	3 55 55	3.9232	3 55 24	34
35	3.9537	3 57 13	3.9450	3 56 42	3.9364	3 56 11	3.9277	3 55 40	35
36	3.9583	3 57 30	3.9496	3 56 59	3.9410	3 56 28	3.9323	3 55 56	36
37	3.9629	3 57 46	3.9542	3 57 15	3.9456	3 56 44	3.9368	3 56 12	37
38	3.9675	3 58 03	3.9588	3 57 31	3.9501	3 57 00	3.9414	3 56 29	38
39	3.9721	3 58 20	3.9634	3 57 48	3.9547	3 57 17	3.9460	3 56 46	39
40	3.9767	3 58 36	3.9680	3 58 05	3.9593	3 57 33	3.9505	3 57 02	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$8^h\ 14^m\ 00^s$		$8^h\ 14^m\ 30^s$		$8^h\ 15^m\ 00^s$		$8^h\ 15^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	3·7708	3 46 15	3·7625	3 45 45	3·7542	3 45 15	3·7458	3 44 45	1
2	3·7750	3 46 30	3·7666	3 46 00	3·7583	3 45 30	3·7500	3 45 00	2
3	3·7793	3 46 45	3·7708	3 46 15	3·7625	3 45 45	3·7542	3 45 15	3
4	3·7835	3 47 01	3·7750	3 46 30	3·7666	3 46 00	3·7584	3 45 30	4
5	3·7877	3 47 16	3·7793	3 46 45	3·7709	3 46 15	3·7626	3 45 45	5
6	3·7919	3 47 31	3·7835	3 47 01	3·7751	3 46 30	3·7668	3 46 00	6
7	3·7962	3 47 46	3·7877	3 47 16	3·7794	3 46 46	3·7710	3 46 16	7
8	3·8005	3 48 02	3·7920	3 47 31	3·7836	3 47 01	3·7753	3 46 31	8
9	3·8047	3 48 17	3·7962	3 47 46	3·7878	3 47 16	3·7795	3 46 46	9
10	3·8090	3 48 32	3·8005	3 48 02	3·7921	3 47 32	3·7837	3 47 01	10
11	3·8133	3 48 48	3·8048	3 48 17	3·7964	3 47 47	3·7880	3 47 17	11
12	3·8176	3 49 03	3·8091	3 48 33	3·8006	3 48 02	3·7923	3 47 32	12
13	3·8219	3 49 19	3·8134	3 48 48	3·8050	3 48 18	3·7965	3 47 47	13
14	3·8263	3 49 35	3·8176	3 49 03	3·8093	3 48 33	3·8008	3 48 03	14
15	3·8305	3 49 50	3·8220	3 49 19	3·8134	3 48 48	3·8052	3 48 19	15
16	3·8348	3 50 05	3·8264	3 49 35	3·8179	3 49 04	3·8095	3 48 34	16
17	3·8392	3 50 21	3·8306	3 49 50	3·8222	3 49 20	3·8137	3 48 49	17
18	3·8435	3 50 37	3·8349	3 50 06	3·8265	3 49 35	3·8180	3 49 05	18
19	3·8478	3 50 52	3·8393	3 50 21	3·8308	3 49 51	3·8224	3 49 21	19
20	3·8523	3 51 08	3·8437	3 50 37	3·8352	3 50 07	3·8267	3 49 36	20
21	3·8566	3 51 24	3·8480	3 50 53	3·8395	3 50 22	3·8311	3 49 52	21
22	3·8611	3 51 40	3·8525	3 51 09	3·8440	3 50 38	3·8355	3 50 08	22
23	3·8655	3 51 56	3·8568	3 51 24	3·8483	3 50 54	3·8398	3 50 23	23
24	3·8699	3 52 12	3·8613	3 51 41	3·8527	3 51 10	3·8442	3 50 39	24
25	3·8743	3 52 27	3·8656	3 51 56	3·8571	3 51 26	3·8485	3 50 54	25
26	3·8787	3 52 43	3·8701	3 52 12	3·8615	3 51 41	3·8530	3 51 11	26
27	3·8832	3 53 00	3·8745	3 52 28	3·8660	3 51 58	3·8575	3 51 27	27
28	3·8876	3 53 15	3·8789	3 52 44	3·8704	3 52 14	3·8618	3 51 42	28
29	3·8921	3 53 32	3·8834	3 53 00	3·8748	3 52 29	3·8664	3 51 59	29
30	3·8965	3 53 47	3·8878	3 53 16	3·8793	3 52 45	3·8707	3 52 15	30
31	3·9010	3 54 04	3·8924	3 53 33	3·8837	3 53 01	3·8752	3 52 31	31
32	3·9055	3 54 20	3·8968	3 53 48	3·8882	3 53 18	3·8796	3 52 47	32
33	3·9100	3 54 36	3·9022	3 54 08	3·8927	3 53 34	3·8841	3 53 03	33
34	3·9145	3 54 52	3·9058	3 54 21	3·8972	3 53 50	3·8885	3 53 18	34
35	3·9190	3 55 08	3·9103	3 54 37	3·9016	3 54 06	3·8931	3 53 35	35
36	3·9236	3 55 25	3·9149	3 54 54	3·9063	3 54 23	3·8976	3 53 51	36
37	3·9282	3 55 42	3·9194	3 55 10	3·9107	3 54 39	3·9021	3 54 08	37
38	3·9327	3 55 58	3·9239	3 55 26	3·9153	3 54 55	3·9066	3 54 24	38
39	3·9373	3 56 14	3·9285	3 55 42	3·9198	3 55 11	3·9112	3 54 40	39
40	3·9418	3 56 30	3·9331	3 55 59	3·9244	3 55 28	3·9157	3 54 57	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$8^h\ 16^m\ 00^s$		$8^h\ 16^m\ 30^s$		$8^h\ 17^m\ 00^s$		$8^h\ 17^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	3·7375	3 44 15	3·7292	3 43 45	3·7208	3 43 15	3·7125	3 42 45	1
2	3·7416	3 44 30	3·7333	3 44 00	3·7249	3 43 30	3·7165	3 42 59	2
3	3·7458	3 44 45	3·7375	3 44 15	3·7292	3 43 45	3·7207	3 43 15	3
4	3·7500	3 45 00	3·7416	3 44 30	3·7333	3 44 00	3·7248	3 43 29	4
5	3·7543	3 45 16	3·7458	3 44 45	3·7375	3 44 15	3·7291	3 43 45	5
6	3·7584	3 45 30	3·7500	3 45 00	3·7416	3 44 30	3·7332	3 44 00	6
7	3·7626	3 45 46	3·7543	3 45 15	3·7458	3 44 45	3·7374	3 44 15	7
8	3·7668	3 46 00	3·7585	3 45 30	3·7501	3 45 00	3·7416	3 44 30	8
9	3·7710	3 46 16	3·7626	3 45 45	3·7543	3 45 15	3·7457	3 44 45	9
10	3·7753	3 46 31	3·7668	3 46 00	3·7585	3 45 30	3·7500	3 45 00	10
11	3·7795	3 46 46	3·7711	3 46 16	3·7627	3 45 46	3·7543	3 45 15	11
12	3·7838	3 47 01	3·7754	3 46 31	3·7669	3 46 01	3·7585	3 45 30	12
13	3·7881	3 47 17	3·7796	3 46 47	3·7712	3 46 16	3·7627	3 45 46	13
14	3·7924	3 47 33	3·7839	3 47 02	3·7755	3 46 32	3·7669	3 46 01	14
15	3·7966	3 47 48	3·7882	3 47 18	3·7797	3 46 47	3·7712	3 46 16	15
16	3·8009	3 48 03	3·7925	3 47 33	3·7840	3 47 02	3·7755	3 46 32	16
17	3·8053	3 48 19	3·7967	3 47 48	3·7883	3 47 18	3·7797	3 46 47	17
18	3·8096	3 48 35	3·8010	3 48 04	3·7925	3 47 33	3·7840	3 47 02	18
19	3·8138	3 48 49	3·8054	3 48 20	3·7968	3 47 48	3·7883	3 47 18	19
20	3·8182	3 49 06	3·8097	3 48 35	3·8012	3 48 04	3·7926	3 47 33	20
21	3·8225	3 49 21	3·8140	3 48 50	3·8055	3 48 20	3·7969	3 47 49	21
22	3·8269	3 49 37	3·8184	3 49 06	3·8099	3 48 36	3·8013	3 48 05	22
23	3·8313	3 49 53	3·8227	3 49 22	3·8142	3 48 51	3·8056	3 48 20	23
24	3·8356	3 50 08	3·8271	3 49 38	3·8185	3 49 06	3·8100	3 48 36	24
25	3·8400	3 50 24	3·8314	3 49 53	3·8229	3 49 22	3·8143	3 48 51	25
26	3·8444	3 50 40	3·8358	3 50 09	3·8273	3 49 38	3·8186	3 49 07	26
27	3·8488	3 50 55	3·8403	3 50 25	3·8316	3 49 54	3·8231	3 49 23	27
28	3·8532	3 51 12	3·8446	3 50 41	3·8360	3 50 10	3·8274	3 49 39	28
29	3·8576	3 51 27	3·8490	3 50 57	3·8405	3 50 26	3·8317	3 49 54	29
30	3·8621	3 51 44	3·8535	3 51 13	3·8448	3 50 41	3·8362	3 50 10	30
31	3·8665	3 51 59	3·8579	3 51 28	3·8493	3 50 57	3·8406	3 50 26	31
32	3·8710	3 52 16	3·8624	3 51 45	3·8537	3 51 13	3·8450	3 50 42	32
33	3·8755	3 52 32	3·8668	3 52 00	3·8582	3 51 30	3·8495	3 50 58	33
34	3·8799	3 52 48	3·8713	3 52 17	3·8626	3 51 45	3·8539	3 51 14	34
35	3·8844	3 53 04	3·8757	3 52 33	3·8671	3 52 02	3·8584	3 51 30	35
36	3·8889	3 53 20	3·8803	3 52 49	3·8716	3 52 18	3·8629	3 51 47	36
37	3·8934	3 53 36	3·8847	3 53 05	3·8761	3 52 34	3·8673	3 52 02	37
38	3·8979	3 53 52	3·8892	3 53 21	3·8805	3 52 50	3·8717	3 52 18	38
39	3·9025	3 54 09	3·8937	3 53 37	3·8851	3 53 06	3·8763	3 52 35	39
40	3·9070	3 54 25	3·8983	3 53 54	3·8895	3 53 22	3·8808	3 52 51	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$8^h\ 18^m\ 00^s$		$8^h\ 18^m\ 30^s$		$8^h\ 19^m\ 00^s$		$8^h\ 19^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	3.7041	3 42 15	3.6957	3 41 45	3.6874	3 41 15	3.6791	3 40 45	1
2	3.7082	3 42 30	3.6998	3 41 59	3.6915	3 41 29	3.6832	3 41 00	2
3	3.7124	3 42 45	3.7040	3 42 14	3.6957	3 41 45	3.6873	3 41 14	3
4	3.7165	3 42 59	3.7081	3 42 29	3.6998	3 41 59	3.6914	3 41 29	4
5	3.7206	3 43 14	3.7123	3 42 44	3.7036	3 42 13	3.6956	3 41 44	5
6	3.7248	3 43 29	3.7164	3 42 59	3.7080	3 42 29	3.6997	3 41 59	6
7	3.7290	3 43 44	3.7206	3 43 14	3.7122	3 42 44	3.7038	3 42 13	7
8	3.7332	3 44 00	3.7247	3 43 29	3.7163	3 42 59	3.7080	3 42 29	8
9	3.7373	3 44 14	3.7289	3 43 44	3.7205	3 43 14	3.7121	3 42 44	9
10	3.7415	3 44 29	3.7331	3 43 59	3.7247	3 43 29	3.7163	3 42 59	10
11	3.7457	3 44 45	3.7373	3 44 14	3.7289	3 43 44	3.7205	3 43 14	11
12	3.7500	3 45 00	3.7415	3 44 29	3.7331	3 43 59	3.7247	3 43 29	12
13	3.7543	3 45 15	3.7457	3 44 45	3.7373	3 44 14	3.7289	3 43 44	13
14	3.7585	3 45 30	3.7500	3 45 00	3.7415	3 44 29	3.7331	3 43 59	14
15	3.7627	3 45 46	3.7543	3 45 15	3.7458	3 44 45	3.7373	3 44 14	15
16	3.7669	3 46 01	3.7585	3 45 30	3.7500	3 45 00	3.7415	3 44 29	16
17	3.7712	3 46 16	3.7627	3 45 46	3.7542	3 45 15	3.7458	3 44 44	17
18	3.7755	3 46 32	3.7669	3 46 01	3.7584	3 45 30	3.7500	3 45 00	18
19	3.7797	3 46 47	3.7712	3 46 16	3.7627	3 45 46	3.7542	3 45 15	19
20	3.7841	3 47 03	3.7755	3 46 32	3.7670	3 46 01	3.7585	3 45 30	20
21	3.7884	3 47 18	3.7798	3 46 48	3.7712	3 46 16	3.7628	3 45 46	21
22	3.7927	3 47 34	3.7842	3 47 03	3.7756	3 46 32	3.7671	3 46 02	22
23	3.7970	3 47 49	3.7885	3 47 18	3.7799	3 46 48	3.7714	3 46 17	23
24	3.8014	3 48 05	3.7928	3 47 34	3.7842	3 47 03	3.7757	3 46 33	24
25	3.8057	3 48 21	3.7971	3 47 50	3.7885	3 47 18	3.7800	3 46 48	25
26	3.8101	3 48 36	3.8015	3 48 05	3.7929	3 47 34	3.7843	3 47 03	26
27	3.8145	3 48 52	3.8058	3 48 21	3.7973	3 47 50	3.7887	3 47 19	27
28	3.8187	3 49 07	3.8102	3 48 37	3.8015	3 48 05	3.7930	3 47 35	28
29	3.8232	3 49 24	3.8145	3 48 52	3.8059	3 48 21	3.7974	3 47 51	29
30	3.8275	3 49 39	3.8189	3 49 07	3.8103	3 48 37	3.8017	3 48 06	30
31	3.8319	3 49 55	3.8233	3 49 24	3.8147	3 48 53	3.8061	3 48 22	31
32	3.8364	3 50 11	3.8277	3 49 40	3.8191	3 49 09	3.8105	3 48 38	32
33	3.8408	3 50 27	3.8321	3 49 56	3.8235	3 49 25	3.8149	3 48 54	33
34	3.8452	3 50 43	3.8365	3 50 12	3.8279	3 49 40	3.8193	3 49 09	34
35	3.8496	3 50 59	3.8410	3 50 28	3.8323	3 49 56	3.8237	3 49 25	35
36	3.8542	3 51 15	3.8455	3 50 44	3.8368	3 50 12	3.8282	3 49 42	36
37	3.8586	3 51 31	3.8499	3 51 00	3.8413	3 50 29	3.8325	3 49 57	37
38	3.8631	3 51 47	3.8544	3 51 16	3.8456	3 50 44	3.8370	3 50 13	38
39	3.8676	3 52 03	3.8589	3 51 32	3.8502	3 51 01	3.8415	3 50 29	39
40	3.8720	3 52 19	3.8633	3 51 48	3.8546	3 51 17	3.8459	3 50 45	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$8^h\ 20^m\ 00^s$		$8^h\ 20^m\ 30^s$		$8^h\ 21^m\ 00^s$		$8^h\ 21^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	3.6708	3 40 15	3.6624	3 39 45	3.6541	3 39 15	3.6458	3 38 45	1
2	3.6748	3 40 29	3.6665	3 39 59	3.6582	3 39 30	3.6498	3 38 59	2
3	3.6789	3 40 44	3.6706	3 40 14	3.6622	3 39 44	3.6539	3 39 14	3
4	3.6830	3 40 59	3.6747	3 40 29	3.6663	3 39 59	3.6580	3 39 29	4
5	3.6872	3 41 14	3.6788	3 40 43	3.6705	3 40 14	3.6621	3 39 44	5
6	3.6913	3 41 29	3.6829	3 40 58	3.6745	3 40 28	3.6662	3 39 58	6
7	3.6954	3 41 43	3.6871	3 41 14	3.6787	3 40 43	3.6702	3 40 13	7
8	3.6996	3 41 59	3.6912	3 41 28	3.6828	3 40 58	3.6744	3 40 28	8
9	3.7037	3 42 13	3.6953	3 41 43	3.6869	3 41 13	3.6785	3 40 42	9
10	3.7078	3 42 28	3.6995	3 41 58	3.6910	3 41 28	3.6827	3 40 58	10
11	3.7120	3 42 43	3.7037	3 42 13	3.6952	3 41 43	3.6868	3 41 12	11
12	3.7162	3 42 58	3.7078	3 42 28	3.6995	3 41 58	3.6910	3 41 28	12
13	3.7204	3 43 13	3.7120	3 42 43	3.7036	3 42 13	3.6952	3 41 43	13
14	3.7246	3 43 29	3.7162	3 42 58	3.7078	3 42 28	3.6993	3 41 57	14
15	3.7288	3 43 44	3.7204	3 43 13	3.7119	3 42 43	3.7035	3 42 13	15
16	3.7330	3 43 59	3.7246	3 43 29	3.7161	3 42 58	3.7077	3 42 28	16
17	3.7372	3 44 14	3.7288	3 43 43	3.7203	3 43 13	3.7118	3 42 42	17
18	3.7415	3 44 29	3.7330	3 43 59	3.7245	3 43 28	3.7160	3 42 58	18
19	3.7457	3 44 45	3.7372	3 44 14	3.7287	3 43 43	3.7202	3 43 13	19
20	3.7500	3 45 00	3.7415	3 44 29	3.7330	3 43 58	3.7245	3 43 28	20
21	3.7542	3 45 15	3.7458	3 44 45	3.7372	3 44 14	3.7288	3 43 43	21
22	3.7585	3 45 30	3.7501	3 45 00	3.7415	3 44 29	3.7330	3 43 59	22
23	3.7628	3 45 46	3.7543	3 45 15	3.7458	3 44 45	3.7372	3 44 14	23
24	3.7671	3 46 02	3.7586	3 45 31	3.7501	3 45 00	3.7415	3 44 29	24
25	3.7714	3 46 17	3.7629	3 45 46	3.7543	3 45 15	3.7458	3 44 45	25
26	3.7757	3 46 33	3.7672	3 46 02	3.7586	3 45 31	3.7501	3 45 00	26
27	3.7801	3 46 48	3.7715	3 46 17	3.7630	3 45 47	3.7544	3 45 16	27
28	3.7843	3 47 03	3.7758	3 46 33	3.7672	3 46 02	3.7586	3 45 31	28
29	3.7887	3 47 19	3.7802	3 46 49	3.7715	3 46 17	3.7631	3 45 47	29
30	3.7931	3 47 35	3.7845	3 47 04	3.7759	3 46 33	3.7673	3 46 02	30
31	3.7975	3 47 51	3.7889	3 47 20	3.7803	3 46 49	3.7716	3 46 18	31
32	3.8018	3 48 06	3.7932	3 47 36	3.7846	3 47 05	3.7760	3 46 34	32
33	3.8062	3 48 22	3.7976	3 47 51	3.7890	3 47 20	3.7803	3 46 49	33
34	3.8106	3 48 38	3.8020	3 48 07	3.7933	3 47 36	3.7847	3 47 05	34
35	3.8150	3 48 54	3.8064	3 48 23	3.7977	3 47 52	3.7891	3 47 21	35
36	3.8195	3 49 10	3.8108	3 48 39	3.8022	3 48 08	3.7935	3 47 37	36
37	3.8238	3 49 25	3.8152	3 48 55	3.8065	3 48 23	3.7979	3 47 52	37
38	3.8282	3 49 42	3.8196	3 49 11	3.8109	3 48 39	3.8022	3 48 08	38
39	3.8327	3 49 58	3.8241	3 49 27	3.8155	3 48 56	3.8067	3 48 24	39
40	3.8372	3 50 14	3.8285	3 49 42	3.8198	3 49 11	3.8111	3 48 40	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward
	$8^h\ 22^m\ 00^s$		$8^h\ 22^m\ 30^s$		$8^h\ 23^m\ 00^s$		$8^h\ 23^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	3.6374	3 38 15	3.6290	3 37 44	3.6207	3 37 15	3.6123	3 36 44	1
2	3.6414	3 38 29	3.6330	3 37 59	3.6247	3 37 29	3.6163	3 36 59	2
3	3.6455	3 38 44	3.6372	3 38 14	3.6288	3 37 43	3.6204	3 37 13	3
4	3.6496	3 38 59	3.6412	3 38 28	3.6328	3 37 58	3.6244	3 37 28	4
5	3.6538	3 39 13	3.6453	3 38 43	3.6369	3 38 13	3.6285	3 37 42	5
6	3.6578	3 39 28	3.6493	3 38 57	3.6409	3 38 27	3.6325	3 37 57	6
7	3.6618	3 39 42	3.6534	3 39 12	3.6450	3 38 42	3.6367	3 38 12	7
8	3.6660	3 39 58	3.6576	3 39 27	3.6492	3 38 57	3.6408	3 38 27	8
9	3.6702	3 40 13	3.6618	3 39 42	3.6533	3 39 12	3.6449	3 38 42	9
10	3.6742	3 40 27	3.6658	3 39 57	3.6573	3 39 26	3.6489	3 38 56	10
11	3.6783	3 40 42	3.6698	3 40 11	3.6614	3 39 41	3.6530	3 39 11	11
12	4.6825	3 40 57	3.6740	3 40 26	3.6656	3 39 56	3.6572	3 39 26	12
13	3.6867	3 41 12	3.6782	3 40 42	3.6697	3 40 11	3.6612	3 39 40	13
14	3.6908	3 41 27	3.6823	3 40 56	3.6738	3 40 25	3.6654	3 39 55	14
15	3.6950	3 41 43	3.6864	3 41 11	3.6780	3 40 41	3.6695	3 40 10	15
16	3.6992	3 41 57	3.6906	3 41 26	3.6822	3 40 56	3.6737	3 40 25	16
17	3.7033	3 42 12	3.6948	3 41 41	3.6862	3 41 10	3.6778	3 40 40	17
18	3.7075	3 42 27	3.6990	3 41 56	3.6904	3 41 26	3.6820	3 40 55	18
19	3.7117	3 42 42	3.7032	3 42 12	3.6946	3 41 41	3.6861	3 41 10	19
20	3.7159	3 42 57	3.7074	3 42 27	3.6989	3 41 56	3.6904	3 41 25	20
21	3.7202	3 43 13	3.7116	3 42 42	3.7031	3 42 11	3.6945	3 41 40	21
22	3.7244	3 43 28	3.7158	3 42 57	3.7073	3 42 26	3.6988	3 41 55	22
23	3.7287	3 43 43	3.7201	3 43 12	3.7115	3 42 41	3.7030	3 42 11	23
24	3.7329	3 43 58	3.7243	3 43 27	3.7158	3 42 57	3.7072	3 42 26	24
25	3.7372	3 44 14	3.7285	3 43 42	3.7200	3 43 12	3.7114	3 42 41	25
26	3.7415	3 44 29	3.7328	3 43 58	3.7242	3 43 27	3.7157	3 42 57	26
27	3.7458	3 44 45	3.7372	3 44 14	3.7285	3 43 42	3.7200	3 43 12	27
28	3.7501	3 45 00	3.7414	3 44 29	3.7328	3 43 58	3.7242	3 43 27	28
29	3.7544	3 45 16	3.7457	3 44 45	3.7371	3 44 13	3.7285	3 43 42	29
30	3.7586	3 45 31	3.7500	3 45 00	3.7414	3 44 29	3.7328	3 43 58	30
31	3.7630	3 45 47	3.7543	3 45 15	3.7457	3 44 45	3.7371	3 44 14	31
32	3.7673	3 46 02	3.7586	3 45 31	3.7500	3 45 00	3.7414	3 44 29	32
33	3.7716	3 46 18	3.7630	3 45 47	3.7543	3 45 15	3.7457	3 44 45	33
34	3.7760	3 46 34	3.7673	3 46 02	3.7586	3 45 30	3.7500	3 45 00	34
35	3.7803	3 46 49	3.7716	3 46 18	3.7630	3 45 47	3.7544	3 45 16	35
36	3.7847	3 47 05	3.7761	3 46 34	3.7674	3 46 03	3.7587	3 45 31	36
37	3.7892	3 47 21	3.7804	3 46 49	3.7717	3 46 18	3.7631	3 45 47	37
38	3.7935	3 47 37	3.7848	3 47 05	3.7761	3 46 34	3.7674	3 46 03	38
39	3.7980	3 47 53	3.7892	3 47 21	3.7805	3 46 50	3.7718	3 46 18	39
40	3.8023	3 48 08	3.7936	3 47 37	3.7848	3 47 05	3.7762	3 46 34	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$8^h\ 24^m\ 00^s$		$8^h\ 24^m\ 30^s$		$8^h\ 25^m\ 00^s$		$8^h\ 25^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	3.6041	3 36 15	3.5957	3 35 45	3.5873	3 35 14	3.5790	3 34 45	1
2	3.6080	3 36 29	3.5997	3 35 59	3.5912	3 35 28	3.5829	3 34 58	2
3	3.6121	3 36 44	3.6038	3 36 13	3.5953	3 35 43	3.5870	3 35 13	3
4	3.6161	3 36 58	3.6077	3 36 28	3.5993	3 35 57	3.5909	3 35 27	4
5	3.6202	3 37 13	3.6118	3 36 42	3.6034	3 36 12	3.5950	3 35 42	5
6	3.6242	3 37 27	3.6158	3 36 57	3.6073	3 36 26	3.5990	3 35 56	6
7	3.6282	3 37 42	3.6198	3 37 11	3.6114	3 36 41	3.6031	3 36 11	7
8	3.6323	3 37 56	3.6239	3 37 26	3.6155	3 36 56	3.6071	3 36 26	8
9	3.6364	3 38 11	3.6279	3 37 40	3.6195	3 37 10	3.6111	3 36 40	9
10	3.6405	3 38 26	3.6320	3 37 55	3.6236	3 37 25	3.6152	3 36 55	10
11	3.6446	3 38 41	3.6362	3 38 10	3.6277	3 37 40	3.6192	3 37 09	11
12	3.6488	3 38 55	3.6402	3 38 25	3.6318	3 37 54	3.6233	3 37 24	12
13	3.6528	3 39 10	3.6443	3 38 39	3.6359	3 38 09	3.6274	3 37 39	13
14	3.6570	3 39 25	3.6485	3 38 54	3.6400	3 38 24	3.6315	3 37 53	14
15	3.6611	3 39 40	3.6526	3 39 09	3.6441	3 38 39	3.6357	3 38 09	15
16	3.6652	3 39 55	3.6567	3 39 24	3.6482	3 38 54	3.6398	3 38 23	16
17	3.6693	3 40 09	3.6608	3 39 39	3.6523	3 39 08	3.6438	3 38 37	17
18	3.6735	3 40 25	3.6650	3 39 54	3.6564	3 39 23	3.6480	3 38 53	18
19	3.6777	3 40 40	3.6691	3 40 09	3.6606	3 39 38	3.6521	3 39 08	19
20	3.6819	3 40 55	3.6733	3 40 24	3.6648	3 39 53	3.6563	3 39 23	20
21	3.6860	3 41 10	3.6775	3 40 39	3.6689	3 40 08	3.6604	3 39 37	21
22	3.6903	3 41 25	3.6817	3 40 54	3.6732	3 40 24	3.6646	3 39 53	22
23	3.6944	3 41 40	3.6858	3 41 09	3.6773	3 40 38	3.6688	3 40 07	23
24	3.6988	3 41 55	3.6901	3 41 24	3.6816	3 40 54	3.6730	3 40 23	24
25	3.7029	3 42 10	3.6943	3 41 39	3.6857	3 41 09	3.6772	3 40 38	25
26	3.7072	3 42 26	3.6985	3 41 54	3.6899	3 41 24	3.6814	3 40 54	26
27	3.7114	3 42 41	3.7028	3 42 10	3.6942	3 41 39	3.6856	3 41 08	27
28	3.7156	3 42 56	3.7070	3 42 25	3.6984	3 41 54	3.6898	3 41 23	28
29	3.7199	3 43 12	3.7112	3 42 40	3.7026	3 42 09	3.6940	3 41 38	29
30	3.7242	3 43 27	3.7155	3 42 56	3.7069	3 42 25	3.6983	3 41 54	30
31	3.7285	3 43 42	3.7198	3 43 11	3.7112	3 42 40	3.7025	3 42 09	31
32	3.7328	3 43 58	3.7241	3 43 27	3.7154	3 42 55	3.7068	3 42 24	32
33	3.7371	3 44 14	3.7284	3 43 42	3.7197	3 43 11	3.7111	3 42 40	33
34	3.7414	3 44 29	3.7327	3 43 58	3.7240	3 43 26	3.7153	3 42 55	34
35	3.7457	3 44 45	3.7370	3 44 13	3.7283	3 43 42	3.7196	3 43 11	35
36	3.7501	3 45 01	3.7414	3 44 29	3.7327	3 43 58	3.7240	3 43 27	36
37	3.7544	3 45 16	3.7457	3 44 45	3.7370	3 44 13	3.7283	3 43 42	37
38	3.7587	3 45 31	3.7500	3 45 00	3.7413	3 44 29	3.7326	3 43 57	38
39	3.7632	3 45 48	3.7544	3 45 16	3.7457	3 44 45	3.7370	3 44 13	39
40	3.7675	3 46 03	3.7587	3 45 31	3.7500	3 45 00	3.7413	3 44 29	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$8^h\ 26^m\ 00^s$		$8^h\ 26^m\ 30^s$		$8^h\ 27^m\ 00^s$		$8^h\ 27^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	3.5707	3 34 15	3.5622	3 33 44	3.5539	3 33 14	3.5456	3 32 44	1
2	3.5746	3 34 29	3.5662	3 33 58	3.5578	3 33 28	3.5495	3 32 58	2
3	3.5787	3 34 43	3.5703	3 34 13	3.5619	3 33 43	3.5535	3 33 13	3
4	3.5826	3 34 57	3.5742	3 34 27	3.5658	3 33 57	3.5575	3 33 27	4
5	3.5867	3 35 12	3.5782	3 34 42	3.5698	3 34 11	3.5615	3 33 41	5
6	3.5906	3 35 26	3.5822	3 34 56	3.5738	3 34 25	3.5654	3 33 55	6
7	3.5947	3 35 41	3.5862	3 35 10	3.5778	3 34 40	3.5694	3 34 10	7
8	3.5988	3 35 55	3.5903	3 35 25	3.5818	3 34 54	3.5735	3 34 25	8
9	3.6028	3 36 10	3.5942	3 35 39	3.5858	3 35 09	3.5774	3 34 39	9
10	3.6068	3 36 24	3.5983	3 35 54	3.5899	3 35 24	3.5815	3 34 53	10
11	3.6108	3 36 39	3.6024	3 36 09	3.5939	3 35 38	3.5856	3 35 08	11
12	3.6149	3 36 54	3.6064	3 36 23	3.5980	3 35 53	3.5896	3 35 23	12
13	3.6190	3 37 08	3.6105	3 36 38	3.6021	3 36 08	3.5936	3 35 37	13
14	3.6231	3 37 23	3.6146	3 36 53	3.6061	3 36 22	3.5977	3 35 52	14
15	3.6272	3 37 38	3.6187	3 37 07	3.6102	3 36 37	3.6018	3 36 06	15
16	3.6312	3 37 52	3.6228	3 37 22	3.6142	3 36 51	3.6058	3 36 21	16
17	3.6354	3 38 07	3.6268	3 37 36	3.6183	3 37 06	3.6098	3 36 35	17
18	3.6395	3 38 22	3.6309	3 37 51	3.6224	3 37 21	3.6139	3 36 50	18
19	3.6436	3 38 37	3.6351	3 38 06	3.6265	3 37 36	3.6180	3 37 05	19
20	3.6478	3 38 52	3.6392	3 38 21	3.6307	3 37 51	3.6222	3 37 20	20
21	3.6519	3 39 07	3.6433	3 38 36	3.6348	3 38 05	3.6262	3 37 34	21
22	3.6561	3 39 22	3.6475	3 38 51	3.6390	3 38 20	3.6304	3 37 49	22
23	3.6602	3 39 37	3.6517	3 39 06	3.6431	3 38 35	3.6346	3 38 05	23
24	3.6645	3 39 52	3.6558	3 39 21	3.6472	3 38 50	3.6388	3 38 19	24
25	3.6686	3 40 07	3.6600	3 39 36	3.6514	3 39 05	3.6428	3 38 34	25
26	3.6728	3 40 22	3.6642	3 39 51	3.6556	3 39 20	3.6470	3 38 49	26
27	3.6771	3 40 38	3.6684	3 40 06	3.6598	3 39 36	3.6512	3 39 04	27
28	3.6812	3 40 52	3.6726	3 40 21	3.6639	3 39 50	3.6553	3 39 19	28
29	3.6854	3 41 07	3.6768	3 40 36	3.6682	3 40 06	3.6596	3 39 35	29
30	3.6897	3 41 23	3.6810	3 40 52	3.6724	3 40 21	3.6638	3 39 49	30
31	3.6939	3 41 38	3.6852	3 41 07	3.6766	3 40 36	3.6680	3 40 05	31
32	3.6982	3 41 54	3.6895	3 41 22	3.6808	3 40 51	3.6722	3 40 20	32
33	3.7025	3 42 09	3.6938	3 41 37	3.6851	3 41 06	3.6765	3 40 35	33
34	3.7067	3 42 24	3.6980	3 41 53	3.6893	3 41 21	3.6807	3 40 51	34
35	3.7110	3 42 40	3.7023	3 42 08	3.6936	3 41 37	3.6849	3 41 06	35
36	3.7153	3 42 55	3.7066	3 42 24	3.6979	3 41 52	3.6892	3 41 21	36
37	3.7196	3 43 11	3.7109	3 42 39	3.7022	3 42 08	3.6935	3 41 37	37
38	3.7239	3 43 26	3.7152	3 42 55	3.7065	3 42 23	3.6978	3 41 52	38
39	3.7283	3 43 42	3.7195	3 43 10	3.7108	3 42 39	3.7021	3 42 08	39
40	3.7326	3 43 57	3.7238	3 43 25	3.7151	3 42 54	3.7064	3 42 23	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$8^h\ 28^m\ 00^s$		$8^h\ 28^m\ 30^s$		$8^h\ 29^m\ 00^s$		$8^h\ 29^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	3·5372	3 32 14	3·5289	3 31 44	3·5205	3 31 14	3·5122	3 30 44	1
2	3·5412	3 32 28	3·5328	3 31 58	3·5245	3 31 28	3·5161	3 30 58	2
3	3·5452	3 32 43	3·5368	3 32 12	3·5284	3 31 42	3·5201	3 31 12	3
4	3·5491	3 32 57	3·5407	3 32 27	3·5323	3 31 56	3·5239	3 31 26	4
5	3·5531	3 33 11	3·5447	3 32 41	3·5363	3 32 11	3·5279	3 31 40	5
6	3·5571	3 33 26	3·5486	3 32 55	3·5402	3 32 25	3·5318	3 31 54	6
7	3·5611	3 33 40	3·5526	3 33 09	3·5442	3 32 39	3·5358	3 32 09	7
8	3·5651	3 33 54	3·5567	3 33 24	3·5482	3 32 54	3·5398	3 32 23	8
9	3·5690	3 34 08	3·5606	3 33 38	3·5522	3 33 08	3·5438	3 32 37	9
10	3·5731	3 34 23	3·5646	3 33 53	3·5562	3 33 22	3·5478	3 32 52	10
11	3·5771	3 34 38	3·5686	3 34 07	3·5602	3 33 37	3·5518	3 33 06	11
12	3·5812	3 34 52	3·5727	3 34 22	3·5642	3 33 51	3·5558	3 33 21	12
13	3·5852	3 35 07	3·5767	3 34 36	3·5682	3 34 06	3·5598	3 33 35	13
14	3·5892	3 35 21	3·5808	3 34 51	3·5722	3 34 20	3·5638	3 33 49	14
15	3·5932	3 35 36	3·5848	3 35 05	3·5762	3 34 34	3·5678	3 34 04	15
16	3·5973	3 35 50	3·5888	3 35 19	3·5803	3 34 49	3·5718	3 34 18	16
17	3·6014	3 36 05	3·5928	3 35 34	3·5843	3 35 03	3·5758	3 34 33	17
18	3·6054	3 36 19	3·5969	3 35 49	3·5884	3 35 18	3·5799	3 34 48	18
19	3·6095	3 36 34	3·6010	3 36 04	3·5924	3 35 33	3·5839	3 35 02	19
20	3·6137	3 36 49	3·6051	3 36 18	3·5966	3 35 48	3·5881	3 35 17	20
21	3·6178	3 37 04	3·6092	3 36 33	3·6007	3 36 03	3·5921	3 35 32	21
22	3·6219	3 37 19	3·6133	3 36 48	3·6048	3 36 17	3·5962	3 35 46	22
23	3·6260	3 37 34	3·6174	3 37 03	3·6088	3 36 31	3·6003	3 36 01	23
24	3·6302	3 37 49	3·6216	3 37 18	3·6130	3 36 47	3·6045	3 36 16	24
25	3·6343	3 38 03	3·6257	3 37 33	3·6171	3 37 02	3·6085	3 36 30	25
26	3·6385	3 38 18	3·6298	3 37 47	3·6212	3 37 16	3·6127	3 36 46	26
27	3·6427	3 38 34	3·6341	3 38 03	3·6254	3 37 31	3·6168	3 37 00	27
28	3·6468	3 38 48	3·6382	3 38 18	3·6295	3 37 46	3·6209	3 37 15	28
29	3·6510	3 39 04	3·6423	3 38 32	3·6337	3 38 01	3·6251	3 37 30	29
30	3·6552	3 39 19	3·6465	3 38 47	3·6379	3 38 16	3·6292	3 37 45	30
31	3·6594	3 39 34	3·6508	3 39 03	3·6421	3 38 32	3·6334	3 38 00	31
32	3·6635	3 39 49	3·6549	3 39 18	3·6462	3 38 46	3·6377	3 38 16	32
33	3·6678	3 40 04	3·6592	3 39 33	3·6505	3 39 02	3·6418	3 38 30	33
34	3·6721	3 40 20	3·6633	3 39 48	3·6547	3 39 17	3·6460	3 38 46	34
35	3·6762	3 40 34	3·6676	3 40 03	3·6589	3 39 32	3·6502	3 39 01	35
36	3·6806	3 40 50	3·6719	3 40 19	3·6632	3 39 48	3·6545	3 39 16	36
37	3·6848	3 41 05	3·6761	3 40 34	3·6674	3 40 03	3·6588	3 39 31	37
38	3·6891	3 41 21	3·6803	3 40 49	3·6717	3 40 18	3·6629	3 39 46	38
39	3·6934	3 41 36	3·6847	3 41 05	3·6759	3 40 33	3·6672	3 40 02	39
40	3·6977	3 41 52	3·6889	3 41 20	3·6802	3 40 49	3·6715	3 40 17	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$8^h\ 30^m\ 00^s$		$8^h\ 30^m\ 30^s$		$8^h\ 31^m\ 00^s$		$8^h\ 31^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	3·5039	3 30 14	3·4956	3 29 44	3·4872	3 29 14	3·4789	3 28 44	1
2	3·5078	3 30 28	3·4995	3 29 58	3·4911	3 29 28	3·4828	3 28 58	2
3	3·5118	3 30 42	3·5034	3 30 12	3·4950	3 29 42	3·4867	3 29 12	3
4	3·5156	3 30 56	3·5072	3 30 26	3·4989	3 29 56	3·4905	3 29 26	4
5	3·5196	3 31 11	3·5112	3 30 40	3·5028	3 30 10	3·4945	3 29 40	5
6	3·5235	3 31 25	3·5151	3 30 54	3·5067	3 30 24	3·4983	3 29 54	6
7	3·5274	3 31 39	3·5191	3 31 09	3·5107	3 30 39	3·5022	3 30 08	7
8	3·5314	3 31 53	3·5231	3 31 23	3·5146	3 30 53	3·5062	3 30 22	8
9	3·5353	3 32 07	3·5269	3 31 37	3·5185	3 31 06	3·5101	3 30 36	9
10	3·5393	3 32 21	3·5309	3 31 51	3·5225	3 31 21	3·5141	3 30 51	10
11	3·5433	3 32 36	3·5349	3 32 06	3·5265	3 31 35	3·5180	3 31 05	11
12	3·5473	3 32 51	3·5389	3 32 20	3·5305	3 31 50	3·5220	3 31 19	12
13	3·5513	3 33 05	3·5429	3 32 34	3·5344	3 32 04	3·5260	3 31 34	13
14	3·5553	3 33 19	3·5469	3 32 49	3·5384	3 32 18	3·5300	3 31 48	14
15	3·5593	3 33 33	3·5509	3 33 03	3·5424	3 32 33	3·5339	3 32 02	15
16	3·5633	3 33 48	3·5549	3 33 18	3·5464	3 32 47	3·5379	3 32 16	16
17	3·5674	3 34 03	3·5589	3 33 32	3·5504	3 33 01	3·5419	3 32 31	17
18	3·5714	3 34 17	3·5629	3 33 46	3·5544	3 33 16	3·5459	3 32 45	18
19	3·5754	3 34 31	3·5670	3 34 02	3·5584	3 33 30	3·5499	3 33 00	19
20	3·5795	3 34 46	3·5711	3 34 16	3·5625	3 33 45	3·5540	3 33 15	20
21	3·5836	3 35 01	3·5751	3 34 30	3·5666	3 34 00	3·5580	3 33 29	21
22	3·5878	3 35 16	3·5792	3 34 45	3·5707	3 34 15	3·5622	3 33 44	22
23	3·5918	3 35 30	3·5832	3 35 00	3·5747	3 34 29	3·5662	3 33 58	23
24	3·5959	3 35 45	3·5874	3 35 15	3·5788	3 34 43	3·5704	3 34 13	24
25	3·6000	3 36 00	3·5914	3 35 29	3·5828	3 34 58	3·5743	3 34 27	25
26	3·6042	3 36 15	3·5956	3 35 44	3·5870	3 35 14	3·5784	3 34 42	26
27	3·6082	3 36 30	3·5998	3 35 59	3·5911	3 35 28	3·5825	3 34 57	27
28	3·6123	3 36 44	3·6038	3 36 13	3·5952	3 35 43	3·5866	3 35 12	28
29	3·6165	3 36 59	3·6079	3 36 28	3·5993	3 35 57	3·5907	3 35 27	29
30	3·6207	3 37 15	3·6121	3 36 44	3·6035	3 36 13	3·5948	3 35 41	30
31	3·6250	3 37 30	3·6164	3 36 59	3·6078	3 36 28	3·5992	3 35 57	31
32	3·6290	3 37 44	3·6204	3 37 13	3·6118	3 36 42	3·6032	3 36 12	32
33	3·6332	3 38 00	3·6245	3 37 28	3·6159	3 36 57	3·6072	3 36 26	33
34	3·6374	3 38 15	3·6288	3 37 43	3·6201	3 37 12	3·6114	3 36 41	34
35	3·6416	3 38 30	3·6329	3 37 58	3·6242	3 37 27	3·6156	3 36 56	35
36	3·6458	3 38 45	3·6372	3 38 14	3·6285	3 37 42	3·6198	3 37 11	36
37	3·6501	3 39 00	3·6414	3 38 29	3·6327	3 37 58	3·6240	3 37 27	37
38	3·6542	3 39 15	3·6456	3 38 44	3·6369	3 38 13	3·6282	3 37 42	38
39	3·6586	3 39 31	3·6499	3 39 00	3·6412	3 38 29	3·6324	3 37 57	39
40	3·6628	3 39 46	3·6541	3 39 15	3·6453	3 38 43	3·6367	3 38 12	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$8^h\ 32^m\ 00^s$		$8^h\ 32^m\ 30^s$		$8^h\ 33^m\ 00^s$		$8^h\ 33^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	3.4705	3 28 14	3.4622	3 27 44	3.4538	3 27 14	3.4455	3 26 44	1
2	3.4743	3 28 28	3.4660	3 27 58	3.4577	3 27 28	3.4493	3 26 57	2
3	3.4782	3 28 42	3.4699	3 28 12	3.4615	3 27 41	3.4532	3 27 11	3
4	3.4821	3 28 56	3.4738	3 28 26	3.4654	3 27 55	3.4570	3 27 25	4
5	3.4860	3 29 10	3.4777	3 28 40	3.4693	3 28 09	3.4609	3 27 39	5
6	3.4899	3 29 24	3.4816	3 28 54	3.4731	3 28 23	3.4647	3 27 53	6
7	3.4940	3 29 38	3.4855	3 29 08	3.4770	3 28 37	3.4686	3 28 07	7
8	3.4978	3 29 52	3.4894	3 29 22	3.4810	3 28 52	3.4726	3 28 21	8
9	3.5016	3 30 06	3.4922	3 29 36	3.4848	3 29 05	3.4764	3 28 35	9
10	3.5056	3 30 20	3.4972	3 29 50	3.4887	3 29 19	3.4803	3 28 49	10
11	3.5096	3 30 34	3.5012	3 30 04	3.4927	3 29 34	3.4843	3 29 03	11
12	3.5135	3 30 48	3.5050	3 30 18	3.4966	3 29 48	3.4882	3 29 17	12
13	3.5174	3 31 02	3.5091	3 30 32	3.5006	3 30 02	3.4921	3 29 32	13
14	3.5215	3 31 16	3.5130	3 30 46	3.5042	3 30 16	3.4961	3 29 46	14
15	3.5254	3 31 30	3.5169	3 31 00	3.5085	3 30 31	3.5000	3 30 00	15
16	3.5293	3 31 44	3.5210	3 31 14	3.5124	3 30 45	3.5040	3 30 14	16
17	3.5334	3 31 58	3.5249	3 31 28	3.5164	3 30 59	3.5079	3 30 28	17
18	3.5373	3 32 12	3.5290	3 31 43	3.5204	3 31 13	3.5119	3 30 43	18
19	3.5414	3 32 27	3.5329	3 31 58	3.5244	3 31 28	3.5159	3 30 57	19
20	3.5449	3 32 42	3.5370	3 32 13	3.5284	3 31 42	3.5199	3 31 12	20
21	3.5495	3 32 57	3.5409	3 32 27	3.5324	3 31 57	3.5239	3 31 26	21
22	3.5535	3 33 12	3.5450	3 32 42	3.5365	3 32 11	3.5279	3 31 40	22
23	3.5575	3 33 27	3.5490	3 32 57	3.5405	3 32 26	3.5319	3 31 55	23
24	3.5617	3 33 42	3.5531	3 33 11	3.5445	3 32 40	3.5360	3 32 10	24
25	3.5656	3 33 57	3.5571	3 33 26	3.5485	3 32 55	3.5400	3 32 24	25
26	3.5697	3 34 11	3.5612	3 33 41	3.5526	3 33 09	3.5440	3 32 38	26
27	3.5739	3 34 26	3.5654	3 33 56	3.5567	3 33 24	3.5481	3 32 53	27
28	3.5779	3 34 41	3.5694	3 34 10	3.5608	3 33 39	3.5521	3 33 08	28
29	3.5820	3 34 56	3.5735	3 34 25	3.5648	3 33 53	3.5562	3 33 22	29
30	3.5862	3 35 10	3.5776	3 34 40	3.5689	3 34 08	3.5603	3 33 37	30
31	3.5903	3 35 25	3.5817	3 34 55	3.5731	3 34 23	3.5644	3 33 52	31
32	3.5944	3 35 40	3.5859	3 35 10	3.5772	3 34 38	3.5685	3 34 07	32
33	3.5986	3 35 55	3.5899	3 35 25	3.5813	3 34 53	3.5726	3 34 21	33
34	3.6027	3 36 10	3.5941	3 35 40	3.5854	3 35 07	3.5768	3 34 36	34
35	3.6069	3 36 25	3.5983	3 35 55	3.5896	3 35 23	3.5809	3 34 51	35
36	3.6111	3 36 40	3.6025	3 36 09	3.5938	3 35 38	3.5851	3 35 06	36
37	3.6153	3 36 55	3.6066	3 36 24	3.5979	3 35 52	3.5892	3 35 21	37
38	3.6195	3 37 10	3.6108	3 36 39	3.6021	3 36 08	3.5934	3 35 36	38
39	3.6235	3 37 25	3.6150	3 36 54	3.6063	3 36 23	3.5976	3 35 51	39
40	3.6279	3 37 40	3.6192	3 37 09	3.6104	3 36 37	3.6017	3 36 06	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$8^h\ 34^m\ 00^s$		$8^h\ 34^m\ 30^s$		$8^h\ 35^m\ 00^s$		$8^h\ 35^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	3·4372	3 26 14	3·4288	3 25 44	3·4205	3 25 14	3·4121	3 24 44	1
2	3·4410	3 26 28	3·4327	3 25 58	3·4243	3 25 27	3·4159	3 24 57	2
3	3·4448	3 26 42	3·4365	3 26 11	3·4282	3 25 42	3·4197	3 25 11	3
4	3·4487	3 26 55	3·4403	3 26 25	3·4320	3 25 55	3·4235	3 25 25	4
5	3·4526	3 27 09	3·4441	3 26 39	3·4358	3 26 09	3·4274	3 25 39	5
6	3·4564	3 27 23	3·4480	3 26 53	3·4396	3 26 23	3·4312	3 25 52	6
7	3·4603	3 27 37	3·4518	3 27 07	3·4435	3 26 37	3·4350	3 26 06	7
8	3·4641	3 27 51	3·4557	3 27 21	3·4474	3 26 51	3·4389	3 26 20	8
9	3·4680	3 28 05	3·4596	3 27 35	3·4512	3 27 04	3·4428	3 26 34	9
10	3·4719	3 28 19	3·4635	3 27 49	3·4551	3 27 19	3·4466	3 26 48	10
11	3·4758	3 28 33	3·4674	3 28 03	3·4590	3 27 32	3·4505	3 27 02	11
12	3·4798	3 28 47	3·4713	3 28 17	3·4629	3 27 46	3·4544	3 27 16	12
13	3·4836	3 29 01	3·4752	3 28 31	3·4668	3 28 00	3·4583	3 27 30	13
14	3·4875	3 29 15	3·4791	3 28 45	3·4708	3 28 15	3·4622	3 27 44	14
15	3·4915	3 29 29	3·4831	3 28 59	3·4746	3 28 29	3·4661	3 27 58	15
16	3·4955	3 29 44	3·4870	3 29 13	3·4784	3 28 42	3·4700	3 28 12	16
17	3·4995	3 29 58	3·4909	3 29 27	3·4824	3 28 57	3·4739	3 28 26	17
18	3·5034	3 30 12	3·4949	3 29 42	3·4864	3 29 11	3·4777	3 28 40	18
19	3·5074	3 30 27	3·4989	3 29 56	3·4904	3 29 25	3·4818	3 28 54	19
20	3·5114	3 30 41	3·5028	3 30 10	3·4943	3 29 40	3·4858	3 29 09	20
21	3·5154	3 30 55	3·5068	3 30 24	3·4983	3 29 54	3·4897	3 29 23	21
22	3·5194	3 31 10	3·5108	3 30 39	3·5024	3 30 09	3·4937	3 29 37	22
23	3·5234	3 31 24	3·5148	3 30 53	3·5063	3 30 23	3·4977	3 29 52	23
24	3·5274	3 31 39	3·5188	3 31 07	3·5103	3 30 37	3·5017	3 30 06	24
25	3·5314	3 31 53	3·5229	3 31 22	3·5143	3 30 51	3·5057	3 30 21	25
26	3·5355	3 32 08	3·5269	3 31 37	3·5183	3 31 06	3·5097	3 30 35	26
27	3·5395	3 32 22	3·5309	3 31 51	3·5224	3 31 21	3·5137	3 30 49	27
28	3·5436	3 32 37	3·5350	3 32 06	3·5264	3 31 35	3·5177	3 31 04	28
29	3·5476	3 32 51	3·5390	3 32 20	3·5304	3 31 49	3·5218	3 31 18	29
30	3·5517	3 33 06	3·5431	3 32 35	3·5345	3 32 04	3·5258	3 31 33	30
31	3·5558	3 33 21	3·5472	3 32 50	3·5386	3 32 19	3·5298	3 31 47	31
32	3·5599	3 33 36	3·5512	3 33 04	3·5427	3 32 34	3·5339	3 32 02	32
33	3·5640	3 33 50	3·5553	3 33 19	3·5468	3 32 48	3·5379	3 32 16	33
34	3·5681	3 34 05	3·5594	3 33 34	3·5509	3 33 03	3·5421	3 32 31	34
35	3·5722	3 34 20	3·5636	3 33 49	3·5549	3 33 18	3·5462	3 32 46	35
36	3·5764	3 34 35	3·5677	3 34 04	3·5591	3 33 33	3·5503	3 33 01	36
37	3·5806	3 34 50	3·5718	3 34 19	3·5632	3 33 48	3·5544	3 33 16	37
38	3·5847	3 35 05	3·5760	3 34 34	3·5673	3 34 02	3·5585	3 33 31	38
39	3·5889	3 35 20	3·5801	3 34 48	3·5714	3 34 17	3·5627	3 33 46	39
40	3·5930	3 35 35	3·5843	3 35 03	3·5756	3 34 32	3·5668	3 34 00	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$8^h\ 36^m\ 00^s$		$8^h\ 36^m\ 30^s$		$8^h\ 37^m\ 00^s$		$8^h\ 37^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	3·4037	3 24 13	3·3955	3 23 44	3·3871	3 23 14	3·3788	3 22 44	1
2	3·4075	3 24 27	3·3991	3 23 57	3·3909	3 23 27	3·3826	3 22 57	2
3	3·4114	3 24 41	3·4030	3 24 11	3·3947	3 23 41	3·3863	3 23 11	3
4	3·4152	3 24 55	3·4068	3 24 24	3·3984	3 23 54	3·3900	3 23 24	4
5	3·4190	3 25 08	3·4106	3 24 38	3·4023	3 24 08	3·3938	3 23 38	5
6	3·4228	3 25 22	3·4144	3 24 52	3·4060	3 24 22	3·3976	3 23 51	6
7	3·4266	3 25 36	3·4182	3 25 06	3·4098	3 24 35	3·4015	3 24 05	7
8	3·4305	3 25 50	3·4221	3 25 20	3·4137	3 24 49	3·4053	3 24 19	8
9	3·4343	3 26 03	3·4259	3 25 33	3·4175	3 25 03	3·4091	3 24 33	9
10	3·4382	3 26 17	3·4298	3 25 47	3·4213	3 25 17	3·4129	3 24 46	10
11	3·4420	3 26 31	3·4336	3 26 01	3·4252	3 25 31	3·4168	3 25 00	11
12	3·4459	3 26 45	3·4375	3 26 15	3·4291	3 25 45	3·4206	3 25 14	12
13	3·4499	3 27 00	3·4414	3 26 29	3·4330	3 25 59	3·4245	3 25 28	13
14	3·4537	3 27 13	3·4452	3 26 43	3·4368	3 26 12	3·4284	3 25 42	14
15	3·4576	3 27 27	3·4491	3 26 57	3·4407	3 26 26	3·4323	3 25 56	15
16	3·4615	3 27 41	3·4530	3 27 11	3·4446	3 26 41	3·4361	3 26 10	16
17	3·4655	3 27 56	3·4569	3 27 25	3·4485	3 26 55	3·4400	3 26 24	17
18	3·4694	3 28 10	3·4608	3 27 39	3·4524	3 27 09	3·4439	3 26 38	18
19	3·4733	3 28 24	3·4647	3 27 53	3·4563	3 27 23	3·4478	3 26 52	19
20	3·4773	3 28 38	3·4687	3 28 07	3·4602	3 27 37	3·4517	3 27 06	20
21	3·4812	3 28 52	3·4726	3 28 21	3·4642	3 27 51	3·4557	3 27 21	21
22	3·4852	3 29 07	3·4766	3 28 35	3·4682	3 28 05	3·4597	3 27 35	22
23	3·4892	3 29 21	3·4806	3 28 50	3·4721	3 28 20	3·4636	3 27 49	23
24	3·4932	3 29 36	3·4846	3 29 05	3·4761	3 28 34	3·4676	3 28 03	24
25	3·4972	3 29 50	3·4885	3 29 19	3·4800	3 28 48	3·4715	3 28 17	25
26	3·5012	3 30 04	3·4925	3 29 33	3·4840	3 29 02	3·4754	3 28 31	26
27	3·5051	3 30 18	3·4966	3 29 48	3·4880	3 29 17	3·4794	3 28 46	27
28	3·5092	3 30 33	3·5006	3 30 02	3·4920	3 29 31	3·4834	3 29 00	28
29	3·5131	3 30 47	3·5046	3 30 17	3·4960	3 29 46	3·4874	3 29 15	29
30	3·5173	3 31 02	3·5086	3 30 31	3·5000	3 30 00	3·4914	3 29 29	30
31	3·5213	3 31 17	3·5127	3 30 46	3·5040	3 30 14	3·4954	3 29 43	31
32	3·5253	3 31 31	3·5167	3 31 00	3·5081	3 30 29	3·4994	3 29 58	32
33	3·5294	3 31 46	3·5208	3 31 15	3·5121	3 30 44	3·5035	3 30 13	33
34	3·5335	3 32 01	3·5248	3 31 29	3·5161	3 30 58	3·5075	3 30 27	34
35	3·5375	3 32 15	3·5289	3 31 44	3·5202	3 31 13	3·5116	3 30 42	35
36	3·5417	3 32 30	3·5330	3 31 59	3·5243	3 31 27	3·5157	3 30 57	36
37	3·5458	3 32 45	3·5371	3 32 14	3·5284	3 31 42	3·5197	3 31 11	37
38	3·5498	3 32 59	3·5412	3 32 28	3·5325	3 31 57	3·5238	3 31 26	38
39	3·5540	3 33 18	3·5453	3 32 43	3·5366	3 32 12	3·5279	3 31 40	39
40	3·5581	3 33 29	3·5494	3 32 58	3·5407	3 32 27	3·5320	3 31 55	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$8^h\ 38^m\ 00^s$		$8^h\ 38^m\ 30^s$		$8^h\ 39^m\ 00^s$		$8^h\ 39^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	3·3704	3 22 13	3·3621	3 21 44	3·3538	3 21 13	3·3454	3 20 43	1
2	3·3742	3 22 27	3·3658	3 21 57	3·3575	3 21 27	3·3490	3 20 56	2
3	3·3779	3 22 40	3·3695	3 22 10	3·3613	3 21 41	3·3528	3 21 10	3
4	3·3817	3 22 54	3·3733	3 22 24	3·3649	3 21 54	3·3566	3 21 24	4
5	3·3855	3 23 08	3·3771	3 22 38	3·3687	3 22 08	3·3603	3 21 37	5
6	3·3892	3 23 21	3·3809	3 22 51	3·3725	3 22 21	3·3640	3 21 50	6
7	3·3931	3 23 35	3·3846	3 23 05	3·3763	3 22 35	3·3678	3 22 04	7
8	3·3969	3 23 49	3·3884	3 23 18	3·3801	3 22 48	3·3717	3 22 18	8
9	3·4006	3 24 02	3·3923	3 23 32	3·3839	3 23 02	3·3714	3 22 31	9
10	3·4045	3 24 16	3·3961	3 23 46	3·3876	3 23 16	3·3792	3 22 45	10
11	3·4083	3 24 30	3·3999	3 24 00	3·3915	3 23 29	3·3830	3 22 59	11
12	3·4122	3 24 44	3·4037	3 24 13	3·3953	3 23 43	3·3868	3 23 12	12
13	3·4160	3 24 58	3·4075	3 24 27	3·3992	3 23 57	3·3906	3 23 26	13
14	3·4199	3 25 12	3·4114	3 24 41	3·4030	3 24 11	3·3944	3 23 40	14
15	3·4237	3 25 25	3·4152	3 24 55	3·4068	3 24 24	3·3983	3 23 54	15
16	3·4276	3 25 39	3·4191	3 25 08	3·4106	3 24 38	3·4021	3 24 07	16
17	3·4315	3 25 53	3·4229	3 25 22	3·4145	3 24 52	3·4060	3 24 22	17
18	3·4353	3 26 07	3·4268	3 25 36	3·4184	3 25 06	3·4098	3 24 35	18
19	3·4393	3 26 21	3·4307	3 25 50	3·4222	3 25 20	3·4137	3 24 49	19
20	3·4432	3 26 35	3·4346	3 26 05	3·4261	3 25 34	3·4176	3 25 03	20
21	3·4471	3 26 49	3·4385	3 26 19	3·4300	3 25 48	3·4214	3 25 17	21
22	3·4510	3 27 04	3·4425	3 26 33	3·4340	3 26 02	3·4253	3 25 31	22
23	3·4549	3 27 18	3·4464	3 26 47	3·4379	3 26 16	3·4292	3 25 45	23
24	3·4588	3 27 32	3·4503	3 27 01	3·4419	3 26 31	3·4332	3 26 00	24
25	3·4627	3 27 46	3·4542	3 27 16	3·4457	3 26 45	3·4371	3 26 14	25
26	3·4668	3 28 00	3·4582	3 27 30	3·4497	3 27 00	3·4410	3 26 27	26
27	3·4707	3 28 14	3·4622	3 27 44	3·4537	3 27 14	3·4450	3 26 42	27
28	3·4747	3 28 19	3·4662	3 27 59	3·4575	3 27 28	3·4489	3 26 56	28
29	3·4786	3 28 43	3·4702	3 28 13	3·4616	3 27 42	3·4528	3 27 10	29
30	3·4827	3 28 58	3·4742	3 28 27	3·4655	3 27 56	3·4568	3 27 24	30
31	3·4867	3 29 12	3·4782	3 28 41	3·4695	3 28 10	3·4608	3 27 39	31
32	3·4908	3 29 27	3·4822	3 28 56	3·4735	3 28 25	3·4648	3 27 53	32
33	3·4948	3 29 41	3·4862	3 29 10	3·4775	3 28 39	3·4689	3 28 08	33
34	3·4988	3 29 56	3·4902	3 29 25	3·4816	3 28 54	3·4728	3 28 22	34
35	3·5029	3 30 10	3·4942	3 29 39	3·4856	3 29 08	3·4768	3 28 36	35
36	3·5070	3 30 25	3·4983	3 29 54	3·4896	3 29 23	3·4809	3 28 51	36
37	3·5110	3 30 40	3·5024	3 30 09	3·4936	3 29 37	3·4849	3 29 06	37
38	3·5150	3 30 54	3·5064	3 30 23	3·4977	3 29 52	3·4889	3 29 20	38
39	3·5191	3 31 09	3·5105	3 30 38	3·5018	3 30 06	3·4930	3 29 35	39
40	3·5232	3 31 24	3·5146	3 30 53	3·5058	3 30 21	3·4970	3 29 49	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$8^h\ 40^m\ 00^s$		$8^h\ 40^m\ 30^s$		$8^h\ 41^m\ 00^s$		$8^h\ 41^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	3·3370	3 20 13	3·3287	3 19 43	3·3203	3 19 13	3·3120	3 18 43	1
2	3·3408	3 20 24	3·3323	3 19 57	3·3240	3 19 26	3·3156	3 18 56	2
3	3·3446	3 20 37	3·3361	3 20 10	3·3277	3 19 40	3·3194	3 19 10	3
4	3·3482	3 20 54	3·3398	3 20 23	3·3315	3 19 53	3·3230	3 19 23	4
5	3·3520	3 21 07	3·3435	3 20 37	3·3352	3 20 07	3·3268	3 19 36	5
6	3·3557	3 21 21	3·3473	3 20 50	3·3389	3 20 20	3·3305	3 19 50	6
7	3·3594	3 21 34	3·3511	3 21 03	3·3426	3 20 33	3·3342	3 20 03	7
8	3·3632	3 21 47	3·3548	3 21 16	3·3464	3 20 46	3·3380	3 20 17	8
9	3·3670	3 22 01	3·3586	3 21 30	3·3501	3 21 00	3·3417	3 20 30	9
10	3·3708	3 22 15	3·3624	3 21 44	3·3539	3 21 14	3·3455	3 20 44	10
11	3·3746	3 22 28	3·3662	3 21 58	3·3576	3 21 27	3·3492	3 20 57	11
12	3·3784	3 22 42	3·3700	3 22 12	3·3615	3 21 41	3·3530	3 21 11	12
13	3·3822	3 22 55	3·3737	3 22 25	3·3653	3 21 55	3·3568	3 21 24	13
14	3·3860	3 23 09	3·3775	3 22 38	3·3691	3 22 09	3·3605	3 21 37	14
15	3·3899	3 23 23	3·3813	3 22 52	3·3728	3 22 22	3·3643	3 21 50	15
16	3·3937	3 23 37	3·3851	3 23 06	3·3767	3 22 36	3·3682	3 22 04	16
17	3·3974	3 23 51	3·3890	3 23 20	3·3805	3 22 50	3·3720	3 22 19	17
18	3·4013	3 24 04	3·3928	3 23 34	3·3843	3 23 03	3·3758	3 22 33	18
19	3·4051	3 24 19	3·3967	3 23 48	3·3881	3 23 17	3·3796	3 22 47	19
20	3·4090	3 24 33	3·4006	3 24 02	3·3920	3 23 31	3·3835	3 23 01	20
21	3·4130	3 24 47	3·4044	3 24 16	3·3958	3 23 45	3·3873	3 23 14	21
22	3·4168	3 25 00	3·4083	3 24 30	3·3997	3 23 59	3·3911	3 23 28	22
23	3·4207	3 25 14	3·4122	3 24 44	3·4036	3 24 13	3·3950	3 23 42	23
24	3·4247	3 25 29	3·4160	3 24 57	3·4075	3 24 27	3·3989	3 23 56	24
25	3·4286	3 25 43	3·4199	3 25 10	3·4114	3 24 41	3·4028	3 24 10	25
26	3·4326	3 25 57	3·4239	3 25 24	3·4153	3 24 55	3·4066	3 24 24	26
27	3·4365	3 26 11	3·4278	3 25 39	3·4192	3 25 09	3·4106	3 24 38	27
28	3·4404	3 26 25	3·4317	3 25 54	3·4231	3 25 23	3·4145	3 24 52	28
29	3·4443	3 26 39	3·4357	3 26 08	3·4270	3 25 37	3·4184	3 25 06	29
30	3·4482	3 26 53	3·4396	3 26 22	3·4310	3 25 51	3·4224	3 25 20	30
31	3·4522	3 27 08	3·4436	3 26 36	3·4350	3 26 06	3·4263	3 25 34	31
32	3·4562	3 27 22	3·4476	3 26 51	3·4389	3 26 20	3·4302	3 25 48	32
33	3·4602	3 27 37	3·4516	3 27 06	3·4429	3 26 34	3·4341	3 26 02	33
34	3·4642	3 27 52	3·4556	3 27 20	3·4468	3 26 48	3·4381	3 26 17	34
35	3·4682	3 28 06	3·4595	3 27 34	3·4508	3 27 03	3·4420	3 26 31	35
36	3·4722	3 28 20	3·4636	3 27 49	3·4548	3 27 17	3·4460	3 26 45	36
37	3·4762	3 28 34	3·4676	3 28 03	3·4588	3 27 31	3·4500	3 26 59	37
38	3·4803	3 28 49	3·4715	3 28 17	3·4628	3 27 45	3·4541	3 27 14	38
39	3·4843	3 29 03	3·4756	3 28 32	3·4668	3 28 00	3·4581	3 27 29	39
40	3·4884	3 29 18	3·4796	3 28 47	3·4709	3 28 15	3·4622	3 27 44	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$8^h\ 42^m\ 00^s$		$8^h\ 42^m\ 30^s$		$8^h\ 43^m\ 00^s$		$8^h\ 43^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	3·3038	3 18 13	3·2953	3 17 43	3·2870	3 17 13	3·2787	3 16 43	1
2	3·3073	3 18 26	3·2990	3 17 56	3·2907	3 17 26	3·2823	3 16 56	2
3	3·3111	3 18 40	3·3027	3 18 10	3·2943	3 17 39	3·2860	3 17 09	3
4	3·3147	3 18 53	3·3063	3 18 23	3·2979	3 17 52	3·2897	3 17 22	4
5	3·3185	3 19 06	3·3100	3 18 36	3·3017	3 18 06	3·2934	3 17 36	5
6	3·3222	3 19 20	3·3137	3 18 50	3·3053	3 18 19	3·2970	3 17 49	6
7	3·3259	3 19 34	3·3174	3 19 03	3·3091	3 18 32	3·3007	3 18 02	7
8	3·3297	3 19 47	3·3212	3 19 16	3·3128	3 18 46	3·3045	3 18 16	8
9	3·3334	3 20 00	3·3249	3 19 29	3·3165	3 18 59	3·3081	3 18 29	9
10	3·3371	3 20 14	3·3286	3 19 43	3·3202	3 19 12	3·3118	3 18 42	10
11	3·3409	3 20 28	3·3324	3 19 57	3·3239	3 19 26	3·3156	3 18 55	11
12	3·3446	3 20 42	3·3361	3 20 10	3·3277	3 19 39	3·3193	3 19 09	12
13	3·3485	3 20 56	3·3399	3 20 23	3·3315	3 19 53	3·3231	3 19 22	13
14	3·3522	3 21 09	3·3436	3 20 36	3·3352	3 20 06	3·3269	3 19 36	14
15	3·3560	3 21 22	3·3474	3 20 50	3·3390	3 20 20	3·3305	3 19 49	15
16	3·3598	3 21 35	3·3512	3 21 04	3·3428	3 20 34	3·3343	3 20 03	16
17	3·3636	3 21 49	3·3550	3 21 18	3·3466	3 20 48	3·3381	3 20 16	17
18	3·3673	3 22 02	3·3587	3 21 31	3·3504	3 21 01	3·3418	3 20 30	18
19	3·3711	3 22 16	3·3626	3 21 55	3·3542	3 21 15	3·3456	3 20 44	19
20	3·3750	3 22 30	3·3665	3 21 59	3·3580	3 21 28	3·3495	3 20 58	20
21	3·3789	3 22 44	3·3703	3 22 13	3·3617	3 21 42	3·3533	3 21 11	21
22	3·3827	3 22 57	3·3741	3 22 27	3·3656	3 21 56	3·3571	3 21 25	22
23	3·3866	3 23 11	3·3779	3 22 40	3·3695	3 22 10	3·3609	3 21 39	23
24	3·3905	3 23 25	3·3818	3 22 54	3·3733	3 22 24	3·3648	3 21 52	24
25	3·3943	3 23 39	3·3856	3 23 08	3·3771	3 22 37	3·3686	3 22 06	25
26	3·3982	3 23 53	3·3895	3 23 22	3·3810	3 22 51	3·3725	3 22 20	26
27	3·4021	3 24 08	3·3934	3 23 36	3·3850	3 23 06	3·3764	3 22 34	27
28	3·4060	3 24 22	3·3973	3 23 50	3·3888	3 23 20	3·3802	3 22 48	28
29	3·4099	3 24 36	3·4012	3 24 04	3·3927	3 23 34	3·3841	3 23 02	29
30	3·4138	3 24 50	3·4052	3 24 19	3·3966	3 23 48	3·3880	3 23 16	30
31	3·4178	3 25 04	3·4091	3 24 33	3·4005	3 24 02	3·3919	3 23 30	31
32	3·4217	3 25 18	3·4130	3 24 47	3·4044	3 24 15	3·3958	3 23 44	32
33	3·4257	3 25 32	3·4169	3 25 01	3·4083	3 24 29	3·3997	3 23 58	33
34	3·4296	3 25 46	3·4208	3 25 15	3·4123	3 24 44	3·4036	3 24 12	34
35	3·4335	3 26 00	3·4248	3 25 29	3·4162	3 24 58	3·4075	3 24 27	35
36	3·4375	3 26 15	3·4288	3 25 44	3·4202	3 25 12	3·4115	3 24 41	36
37	3·4415	3 26 29	3·4327	3 25 58	3·4241	3 25 26	3·4154	3 24 55	37
38	3·4455	3 26 43	3·4367	3 26 12	3·4281	3 25 41	3·4194	3 25 09	38
39	3·4496	3 26 58	3·4407	3 26 26	3·4321	3 25 55	3·4234	3 25 24	39
40	3·4535	3 27 13	3·4447	3 26 41	3·4361	3 26 09	3·4274	3 25 38	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$8^h\ 44^m\ 00^s$		$8^h\ 44^m\ 30^s$		$8^h\ 45^m\ 00^s$		$8^h\ 45^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	3.2703	3 16 13	3.2620	3 15 43	3.2536	3 15 13	3.2453	3 14 43	1
2	3.2739	3 16 26	3.2656	3 15 56	3.2572	3 15 26	3.2489	3 14 56	2
3	3.2776	3 16 39	3.2692	3 16 09	3.2609	3 15 39	3.2525	3 15 09	3
4	3.2813	3 16 53	3.2729	3 16 22	3.2645	3 15 52	3.2561	3 15 22	4
5	3.2850	3 17 06	3.2766	3 16 35	3.2683	3 16 06	3.2598	3 15 35	5
6	3.2886	3 17 19	3.2801	3 16 48	3.2718	3 16 18	3.2634	3 15 48	6
7	3.2923	3 17 32	3.2839	3 17 01	3.2755	3 16 31	3.2671	3 16 01	7
8	3.2961	3 17 46	3.2876	3 17 15	3.2792	3 16 45	3.2707	3 16 15	8
9	3.2997	3 17 59	3.2913	3 17 28	3.2829	3 16 58	3.2744	3 16 28	9
10	3.3034	3 18 12	3.2949	3 17 42	3.2866	3 17 12	3.2781	3 16 41	10
11	3.3072	3 18 26	3.2987	3 17 55	3.2902	3 17 25	3.2818	3 16 54	11
12	3.3109	3 18 39	3.3024	3 18 08	3.2940	3 17 38	3.2854	3 17 07	12
13	3.3146	3 18 53	3.3062	3 18 22	3.2977	3 17 52	3.2891	3 17 21	13
14	3.3183	3 19 06	3.3099	3 18 35	3.3014	3 18 05	3.2928	3 17 35	14
15	3.3221	3 19 20	3.3136	3 18 48	3.3052	3 18 19	3.2966	3 17 48	15
16	3.3258	3 19 33	3.3174	3 19 02	3.3089	3 18 32	3.3003	3 18 01	16
17	3.3296	3 19 47	3.3211	3 19 15	3.3126	3 18 45	3.3040	3 18 15	17
18	3.3334	3 20 00	3.3248	3 19 28	3.3163	3 18 59	3.3078	3 18 29	18
19	3.3371	3 20 14	3.3286	3 19 41	3.3201	3 19 12	3.3115	3 18 42	19
20	3.3409	3 20 27	3.3324	3 19 57	3.3239	3 19 26	3.3153	3 18 55	20
21	3.3447	3 20 41	3.3362	3 20 10	3.3276	3 19 39	3.3191	3 19 09	21
22	3.3487	3 20 55	3.3401	3 20 24	3.3315	3 19 53	3.3228	3 19 22	22
23	3.3524	3 21 09	3.3438	3 20 37	3.3353	3 20 07	3.3266	3 19 36	23
24	3.3562	3 21 22	3.3476	3 20 51	3.3391	3 20 21	3.3304	3 19 49	24
25	3.3600	3 21 36	3.3514	3 21 04	3.3429	3 20 34	3.3342	3 20 03	25
26	3.3639	3 21 50	3.3553	3 21 18	3.3467	3 20 48	3.3380	3 20 17	26
27	3.3677	3 22 04	3.3592	3 21 32	3.3506	3 21 02	3.3419	3 20 31	27
28	3.3716	3 22 18	3.3630	3 21 46	3.3544	3 21 16	3.3457	3 20 45	28
29	3.3755	3 22 32	3.3669	3 22 00	3.3583	3 21 30	3.3495	3 20 59	29
30	3.3793	3 22 45	3.3707	3 22 14	3.3621	3 21 44	3.3534	3 21 13	30
31	3.3832	3 23 00	3.3746	3 22 28	3.3660	3 21 57	3.3572	3 21 26	31
32	3.3871	3 23 14	3.3785	3 22 42	3.3699	3 22 11	3.3610	3 21 40	32
33	3.3910	3 23 28	3.3824	3 22 55	3.3737	3 22 25	3.3649	3 21 54	33
34	3.3950	3 23 42	3.3863	3 23 10	3.3776	3 22 39	3.3688	3 22 08	34
35	3.3988	3 23 56	3.3903	3 23 24	3.3815	3 22 53	3.3727	3 22 22	35
36	3.4028	3 24 10	3.3942	3 23 39	3.3855	3 23 07	3.3767	3 22 37	36
37	3.4068	3 24 24	3.3981	3 23 53	3.3894	3 23 21	3.3806	3 22 51	37
38	3.4107	3 24 38	3.4020	3 24 07	3.3933	3 23 35	3.3845	3 23 05	38
39	3.4146	3 24 52	3.4059	3 24 21	3.3973	3 23 50	3.3885	3 23 19	39
40	3.4186	3 25 07	3.4099	3 24 36	3.4012	3 24 04	3.3924	3 23 33	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$8^h\ 46^m\ 00^s$		$8^h\ 46^m\ 30^s$		$8^h\ 47^m\ 00^s$		$8^h\ 47^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	3.2369	3 14 13	3.2286	3 13 43	3.2202	3 13 13	3.2119	3 12 43	1
2	3.2405	3 14 26	3.2322	3 13 56	3.2238	3 13 25	3.2155	3 12 55	5
3	3.2441	3 14 38	3.2358	3 14 09	3.2274	3 13 37	3.2190	3 13 08	3
4	3.2477	3 14 51	3.2394	3 14 22	3.2310	3 13 50	3.2226	3 13 21	4
5	3.2513	3 15 04	3.2430	3 14 35	3.2347	3 14 03	3.2262	3 13 34	5
6	3.2550	3 15 18	3.2466	3 14 48	3.2383	3 14 17	3.2298	3 13 47	6
7	3.2587	3 15 31	3.2503	3 15 01	3.2419	3 14 31	3.2335	3 14 00	7
8	3.2624	3 15 44	3.2539	3 15 14	3.2456	3 14 44	3.2371	3 14 13	8
9	3.2660	3 15 57	3.2576	3 15 27	3.2492	3 14 57	3.2407	3 14 26	9
10	3.2696	3 16 10	3.2612	3 15 40	3.2528	3 15 10	3.2444	3 14 39	10
11	3.2734	3 16 24	3.2650	3 15 54	3.2565	3 15 23	3.2480	3 14 53	11
12	3.2770	3 16 37	3.2687	3 16 07	3.2601	3 15 36	3.2517	3 15 06	12
13	3.2807	3 16 50	3.2724	3 16 20	3.2638	3 15 49	3.2553	3 15 19	13
14	3.2844	3 17 03	3.2761	3 16 33	3.2675	3 16 03	3.2590	3 15 32	14
15	3.2881	3 17 17	3.2798	3 16 46	3.2712	3 16 16	3.2627	3 15 45	15
16	3.2919	3 17 30	3.2835	3 17 00	3.2750	3 16 29	3.2663	3 15 58	16
17	3.2956	3 17 44	3.2872	3 17 13	3.2786	3 16 43	3.2701	3 16 12	17
18	3.2993	3 17 57	3.2910	3 17 27	3.2823	3 16 57	3.2737	3 16 25	18
19	3.3030	3 18 10	3.2947	3 17 40	3.2859	3 17 10	3.2774	3 16 38	19
20	3.3068	3 18 24	3.2983	3 17 54	3.2897	3 17 23	3.2812	3 16 52	20
21	3.3106	3 18 37	3.3020	3 18 07	3.2935	3 17 36	3.2850	3 17 05	21
22	3.3144	3 18 51	3.3058	3 18 21	3.2973	3 17 49	3.2888	3 17 19	22
23	3.3181	3 19 04	3.3096	3 18 34	3.3010	3 18 03	3.2926	3 17 32	23
24	3.3219	3 19 18	3.3134	3 18 48	3.3048	3 18 16	3.2963	3 17 46	24
25	3.3257	3 19 32	3.3171	3 19 02	3.3085	3 18 29	3.3000	3 17 59	25
26	3.3295	3 19 46	3.3209	3 19 15	3.3124	3 18 43	3.3038	3 18 13	26
27	3.3334	3 20 00	3.3247	3 19 29	3.3161	3 18 57	3.3076	3 18 27	27
28	3.3372	3 20 13	3.3285	3 19 43	3.3199	3 19 10	3.3113	3 18 41	28
29	3.3410	3 20 27	3.3323	3 19 56	3.3238	3 19 24	3.3151	3 18 55	29
30	3.3448	3 20 41	3.3362	3 20 10	3.3276	3 19 39	3.3190	3 19 09	30
31	3.3487	3 20 55	3.3401	3 20 24	3.3315	3 19 53	3.3228	3 19 23	31
32	3.3525	3 21 09	3.3439	3 20 38	3.3353	3 20 07	3.3267	3 19 37	32
33	3.3564	3 21 23	3.3478	3 20 52	3.3391	3 20 20	3.3305	3 19 50	33
34	3.3602	3 21 36	3.3516	3 21 06	3.3430	3 20 34	3.3343	3 20 03	34
35	3.3641	3 21 50	3.3555	3 21 20	3.3468	3 20 48	3.3382	3 20 17	35
36	3.3680	3 22 04	3.3594	3 21 34	3.3507	3 21 02	3.3421	3 20 31	36
37	3.3720	3 22 18	3.3633	3 21 48	3.3545	3 21 17	3.3459	3 20 45	37
38	3.3758	3 22 32	3.3672	3 22 02	3.3585	3 21 31	3.3498	3 20 59	38
39	3.3798	3 22 47	3.3711	3 22 16	3.3623	3 21 45	3.3537	3 21 13	39
40	3.3837	3 23 01	3.3750	3 22 30	3.3662	3 21 59	3.3576	3 21 27	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$8^h\ 48^m\ 00^s$		$8^h\ 48^m\ 30^s$		$8^h\ 49^m\ 00^s$		$8^h\ 49^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	3.2036	3 12 13	3.1952	3 11 42	3.1869	3 11 13	3.1786	3 10 43	1
2	3.2071	3 12 26	3.1987	3 11 55	3.1904	3 11 25	3.1820	3 10 55	2
3	3.2107	3 12 39	3.2023	3 12 08	3.1940	3 11 38	3.1856	3 11 08	3
4	3.2143	3 12 51	3.2059	3 12 21	3.1975	3 11 51	3.1892	3 11 21	4
5	3.2179	3 13 04	3.2095	3 12 34	3.2011	3 12 04	3.1928	3 11 34	5
6	3.2214	3 13 17	3.2131	3 12 47	3.2046	3 12 17	3.1963	3 11 47	6
7	3.2250	3 13 30	3.2166	3 13 00	3.2083	3 12 30	3.1999	3 12 00	7
8	3.2287	3 13 43	3.2203	3 13 13	3.2119	3 12 43	3.2035	3 12 13	8
9	3.2323	3 13 56	3.2239	3 13 26	3.2154	3 12 55	3.2070	3 12 26	9
10	3.2359	3 14 09	3.2275	3 13 39	3.2191	3 13 09	3.2107	3 12 39	10
11	3.2396	3 14 22	3.2312	3 13 52	3.2227	3 13 22	3.2144	3 12 52	11
12	3.2433	3 14 35	3.2348	3 14 05	3.2264	3 13 35	3.2179	3 13 05	12
13	3.2469	3 14 48	3.2384	3 14 18	3.2300	3 13 48	3.2216	3 13 18	13
14	3.2506	3 15 01	3.2420	3 14 31	3.2326	3 14 01	3.2252	3 13 31	14
15	3.2542	3 15 15	3.2457	3 14 45	3.2378	3 14 14	3.2289	3 13 44	15
16	3.2579	3 15 28	3.2494	3 14 58	3.2409	3 14 27	3.2325	3 13 57	16
17	3.2616	3 15 41	3.2531	3 15 11	3.2446	3 14 41	3.2362	3 14 10	17
18	3.2652	3 15 55	3.2568	3 15 24	3.2483	3 14 54	3.2399	3 14 23	18
19	3.2690	3 16 08	3.2604	3 15 37	3.2519	3 15 07	3.2434	3 14 36	19
20	3.2727	3 16 22	3.2642	3 15 51	3.2557	3 15 21	3.2472	3 14 50	20
21	3.2764	3 16 35	3.2678	3 16 04	3.2594	3 15 34	3.2509	3 15 03	21
22	3.2801	3 16 48	3.2716	3 16 17	3.2631	3 15 47	3.2546	3 15 17	22
23	3.2840	3 17 02	3.2754	3 16 31	3.2668	3 16 01	3.2583	3 15 30	23
24	3.2876	3 17 15	3.2791	3 16 45	3.2705	3 16 14	3.2621	3 15 44	24
25	3.2914	3 17 29	3.2828	3 16 58	3.2743	3 16 28	3.2658	3 15 57	25
26	3.2952	3 17 43	3.2866	3 17 12	3.2780	3 16 41	3.2695	3 16 10	26
27	3.2989	3 17 56	3.2904	3 17 26	3.2818	3 16 55	3.2733	3 16 24	27
28	3.3027	3 18 10	3.2941	3 17 39	3.2855	3 17 08	3.2769	3 16 37	28
29	3.3065	3 18 23	3.2979	3 17 52	3.2893	3 17 22	3.2808	3 16 51	29
30	3.3103	3 18 37	3.3017	3 18 06	3.2931	3 17 35	3.2845	3 17 04	30
31	3.3141	3 18 51	3.3055	3 18 19	3.2969	3 17 49	3.2883	3 17 18	31
32	3.3179	3 19 05	3.3092	3 18 33	3.3007	3 18 03	3.2921	3 17 32	32
33	3.3218	3 19 19	3.3130	3 18 47	3.3045	3 18 16	3.2959	3 17 45	33
34	3.3257	3 19 32	3.3169	3 18 01	3.3083	3 18 30	3.2997	3 17 59	34
35	3.3294	3 19 46	3.3208	3 19 15	3.3120	3 18 43	3.3035	3 18 13	35
36	3.3333	3 20 00	3.3246	3 19 28	3.3159	3 18 57	3.3073	3 18 26	36
37	3.3372	3 20 14	3.3285	3 19 42	3.3198	3 19 11	3.3112	3 18 40	37
38	3.3411	3 20 28	3.3323	3 19 56	3.3236	3 19 25	3.3150	3 18 54	38
39	3.3449	3 20 42	3.3362	3 20 10	3.3275	3 19 39	3.3188	3 19 08	39
40	3.3488	3 20 56	3.3401	3 20 24	3.3314	3 19 53	3.3226	3 19 21	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$8^h\ 50^m\ 00^s$		$8^h\ 50^m\ 30^s$		$8^h\ 51^m\ 00^s$		$8^h\ 51^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	3.1701	3 10 12	3.1618	3 09 43	3.1535	3 09 13	3.1451	3 08 42	1
2	3.1737	3 10 25	3.1653	3 09 55	3.1569	3 09 25	3.1487	3 08 55	2
3	3.1772	3 10 38	3.1689	3 10 08	3.1605	3 09 38	3.1522	3 09 08	3
4	3.1808	3 10 51	3.1724	3 10 21	3.1640	3 09 50	3.1557	3 09 21	4
5	3.1843	3 11 04	3.1761	3 10 34	3.1676	3 10 03	3.1592	3 09 33	5
6	3.1879	3 11 16	3.1795	3 10 47	3.1710	3 10 16	3.1627	3 09 46	6
7	3.1914	3 11 29	3.1832	3 11 00	3.1747	3 10 29	3.1663	3 09 59	7
8	3.1951	3 11 42	3.1867	3 11 12	3.1783	3 10 41	3.1699	3 10 12	8
9	3.1986	3 11 55	3.1902	3 11 25	3.1818	3 10 54	3.1734	3 10 24	9
10	3.2022	3 12 08	3.1938	3 11 38	3.1854	3 11 07	3.1770	3 10 37	10
11	3.2058	3 12 21	3.1974	3 11 51	3.1890	3 11 20	3.1806	3 10 50	11
12	3.2094	3 12 34	3.2010	3 12 04	3.1926	3 11 33	3.1842	3 11 03	12
13	3.2131	3 12 47	3.2046	3 12 17	3.1961	3 11 45	3.1878	3 11 16	13
14	3.2167	3 13 00	3.2081	3 12 30	3.1998	3 11 59	3.1913	3 11 29	14
15	3.2203	3 13 13	3.2119	3 12 43	3.2034	3 12 12	3.1949	3 11 42	15
16	3.2240	3 13 26	3.2155	3 12 56	3.2070	3 12 25	3.1985	3 11 55	16
17	3.2276	3 13 39	3.2192	3 13 09	3.2106	3 12 38	3.2022	3 12 08	17
18	3.2313	3 13 53	3.2228	3 13 22	3.2143	3 12 51	3.2058	3 12 21	18
19	3.2349	3 14 06	3.2264	3 13 35	3.2179	3 13 04	3.2094	3 12 34	19
20	3.2386	3 14 19	3.2301	3 13 48	3.2215	3 13 17	3.2131	3 12 47	20
21	3.2423	3 14 32	3.2338	3 14 02	3.2252	3 13 31	3.2167	3 13 00	21
22	3.2460	3 14 46	3.2375	3 14 15	3.2290	3 13 44	3.2204	3 13 13	22
23	3.2496	3 15 00	3.2411	3 14 28	3.2326	3 13 57	3.2240	3 13 26	23
24	3.2534	3 15 13	3.2449	3 14 41	3.2363	3 14 11	3.2277	3 13 40	24
25	3.2570	3 15 26	3.2485	3 14 55	3.2399	3 14 24	3.2314	3 13 53	25
26	3.2608	3 15 39	3.2523	3 15 08	3.2436	3 14 37	3.2350	3 14 06	26
27	3.2645	3 15 52	3.2560	3 15 22	3.2474	3 14 51	3.2388	3 14 20	27
28	3.2683	3 16 06	3.2597	3 15 35	3.2510	3 15 03	3.2425	3 14 33	28
29	3.2720	3 16 19	3.2635	3 15 49	3.2548	3 15 17	3.2462	3 14 46	29
30	3.2758	3 16 33	3.2672	3 16 02	3.2586	3 15 31	3.2500	3 15 00	30
31	3.2796	3 16 47	3.2710	3 16 16	3.2624	3 15 45	3.2537	3 15 13	31
32	3.2833	3 17 00	3.2748	3 16 29	3.2661	3 15 58	3.2575	3 15 27	32
33	3.2872	3 17 14	3.2785	3 16 43	3.2699	3 16 12	3.2612	3 15 40	33
34	3.2909	3 17 27	3.2823	3 16 56	3.2737	3 16 25	3.2650	3 15 54	34
35	3.2948	3 17 41	3.2860	3 17 10	3.2774	3 16 39	3.2687	3 16 07	35
36	3.2986	3 17 55	3.2900	3 17 24	3.2813	3 16 53	3.2726	3 16 21	36
37	3.3024	3 18 09	3.2938	3 17 38	3.2850	3 17 06	3.2763	3 16 35	37
38	3.3062	3 18 22	3.2976	3 17 51	3.2888	3 17 20	3.2801	3 16 48	38
39	3.3101	3 18 36	3.3014	3 18 05	3.2927	3 17 34	3.2840	3 17 02	39
40	3.3139	3 18 50	3.3052	3 18 19	3.2965	3 17 47	3.2878	3 17 16	40

Hourly change in longitude to westward	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$8^h\ 52^m\ 00^s$		$8^h\ 52^m\ 30^s$		$8^h\ 53^m\ 00^s$		$8^h\ 53^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	3. 1368	3 08 12	3. 1287	3 07 43	3. 1201	3 07 12	3. 1118	3 06 42	1
2	3. 1403	3 08 25	3. 1320	3 07 55	3. 1236	3 07 26	3. 1152	3 06 54	2
3	3. 1438	3 08 38	3. 1355	3 08 07	3. 1271	3 07 39	3. 1187	3 07 07	3
4	3. 1472	3 08 50	3. 1390	3 08 20	3. 1304	3 07 51	3. 1222	3 07 19	4
5	3. 1509	3 09 03	3. 1426	3 08 33	3. 1341	3 08 03	3. 1256	3 07 32	5
6	3. 1543	3 09 15	3. 1460	3 08 45	3. 1375	3 08 15	3. 1292	3 07 45	6
7	3. 1579	3 09 28	3. 1496	3 08 58	3. 1411	3 08 28	3. 1327	3 07 58	7
8	3. 1614	3 09 41	3. 1531	3 09 11	3. 1446	3 08 41	3. 1362	3 08 11	8
9	3. 1650	3 09 54	3. 1566	3 09 23	3. 1480	3 08 53	3. 1398	3 08 24	9
10	3. 1685	3 10 07	3. 1603	3 09 36	3. 1516	3 09 06	3. 1432	3 08 36	10
11	3. 1721	3 10 19	3. 1639	3 09 49	3. 1550	3 09 18	3. 1469	3 08 49	11
12	3. 1757	3 10 32	3. 1674	3 10 02	3. 1587	3 09 31	3. 1503	3 09 01	12
13	3. 1792	3 10 45	3. 1709	3 10 15	3. 1624	3 09 45	3. 1540	3 09 14	13
14	3. 1829	3 10 58	3. 1744	3 10 28	3. 1659	3 09 58	3. 1575	3 09 27	14
15	3. 1865	3 11 11	3. 1781	3 10 41	3. 1695	3 10 11	3. 1611	3 09 40	15
16	3. 1900	3 11 24	3. 1817	3 10 54	3. 1731	3 10 24	3. 1646	3 09 53	16
17	3. 1937	3 11 37	3. 1852	3 11 06	3. 1766	3 10 37	3. 1682	3 10 06	17
18	3. 1973	3 11 50	3. 1888	3 11 19	3. 1802	3 10 50	3. 1718	3 10 19	18
19	3. 2009	3 12 03	3. 1925	3 11 32	3. 1837	3 11 03	3. 1753	3 10 32	19
20	3. 2046	3 12 16	3. 1960	3 11 45	3. 1875	3 11 15	3. 1790	3 10 45	20
21	3. 2083	3 12 30	3. 1997	3 11 58	3. 1912	3 11 28	3. 1826	3 10 58	21
22	3. 2119	3 12 43	3. 2034	3 12 12	3. 1947	3 11 41	3. 1863	3 11 11	22
23	3. 2155	3 12 56	3. 2070	3 12 25	3. 1983	3 11 54	3. 1899	3 11 24	23
24	3. 2193	3 13 09	3. 2107	3 12 38	3. 2021	3 12 08	3. 1936	3 11 37	24
25	3. 2229	3 13 22	3. 2144	3 12 51	3. 2058	3 12 21	3. 1971	3 11 50	25
26	3. 2265	3 13 35	3. 2180	3 13 04	3. 2094	3 12 34	3. 2008	3 12 03	26
27	3. 2302	3 13 49	3. 2217	3 13 18	3. 2131	3 12 47	3. 2044	3 12 16	27
28	3. 2339	3 14 02	3. 2254	3 13 31	3. 2166	3 13 00	3. 2082	2 12 29	28
29	3. 2377	3 14 14	3. 2290	3 13 44	3. 2204	3 13 13	3. 2118	3 12 42	29
30	3. 2414	3 14 28	3. 2328	3 13 58	3. 2241	3 13 26	3. 2154	3 12 55	30
31	3. 2451	3 14 42	3. 2365	3 14 11	3. 2279	3 13 40	3. 2192	3 13 09	31
32	3. 2489	3 14 56	3. 2402	3 14 24	3. 2316	3 13 54	3. 2230	3 13 23	32
33	3. 2526	3 15 09	3. 2439	3 14 38	3. 2353	3 14 07	3. 2267	3 13 36	33
34	3. 2563	3 15 23	3. 2477	3 14 51	3. 2391	3 14 20	3. 2303	3 13 49	34
35	3. 2601	3 15 36	3. 2514	3 15 05	3. 2428	3 14 33	3. 2340	3 14 03	35
36	3. 2640	3 15 50	3. 2552	3 15 19	3. 2466	3 14 47	3. 2379	3 14 17	36
37	3. 2677	3 16 03	3. 2590	3 15 32	3. 2503	3 15 01	3. 2417	3 14 30	37
38	3. 2715	3 16 17	3. 2628	3 15 46	3. 2541	3 15 15	3. 2454	3 14 43	38
39	3. 2753	3 16 31	3. 2666	3 15 59	3. 2578	3 15 28	3. 2491	3 14 57	39
40	3. 2790	3 16 44	3. 2704	3 16 13	3. 2616	3 15 41	3. 2529	3 15 10	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$8^h\ 54^m\ 00^s$		$8^h\ 54^m\ 30^s$		$8^h\ 55^m\ 00^s$		$8^h\ 55^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	3. 1034	3 06 12	3. 0952	3 05 42	3. 0868	3 05 12	3. 0785	3 04 42	1
2	3. 1069	3 06 25	3. 0985	3 05 55	3. 0902	3 05 24	3. 0819	3 04 55	2
3	3. 1104	3 06 37	3. 1020	3 06 07	3. 0936	3 05 37	3. 0852	3 05 07	3
4	3. 1138	3 06 50	3. 1054	3 06 19	3. 0971	3 05 50	3. 0887	3 05 19	4
5	3. 1173	3 07 02	3. 1090	3 06 32	3. 1005	3 06 02	3. 0923	3 05 32	5
6	3. 1207	3 07 14	3. 1125	3 06 45	3. 1040	3 06 14	3. 0957	3 05 45	6
7	3. 1243	3 07 27	3. 1158	3 06 57	3. 1075	3 06 27	3. 0992	3 05 57	7
8	3. 1278	3 07 40	3. 1196	3 07 10	3. 1110	3 06 40	3. 1027	3 06 10	8
9	3. 1314	3 07 53	3. 1229	3 07 22	3. 1145	3 06 52	3. 1061	3 06 22	9
10	3. 1349	3 08 06	3. 1264	3 07 35	3. 1180	3 07 05	3. 1096	3 06 35	10
11	3. 1384	3 08 18	3. 1300	3 07 48	3. 1215	3 07 17	3. 1131	3 06 47	11
12	3. 1418	3 08 30	3. 1335	3 08 01	3. 1250	3 07 30	3. 1165	3 06 59	12
13	3. 1453	3 08 43	3. 1371	3 08 14	3. 1286	3 07 43	3. 1201	3 07 12	13
14	3. 1489	3 08 56	3. 1406	3 08 27	3. 1320	3 07 55	3. 1236	3 07 25	14
15	3. 1525	3 09 09	3. 1442	3 08 40	3. 1356	3 08 08	3. 1272	3 07 38	15
16	3. 1560	3 09 22	3. 1477	3 08 52	3. 1391	3 08 21	3. 1307	3 07 51	16
17	3. 1596	3 09 34	3. 1513	3 09 05	3. 1427	3 08 34	3. 1343	3 08 03	17
18	3. 1632	3 09 47	3. 1548	3 09 18	3. 1462	3 08 46	3. 1378	3 08 16	18
19	3. 1668	3 10 00	3. 1584	3 09 31	3. 1498	3 08 59	3. 1412	3 08 28	19
20	3. 1703	3 10 13	3. 1620	3 09 44	3. 1534	3 09 12	3. 1447	3 08 41	20
21	3. 1739	3 10 25	3. 1655	3 09 56	3. 1569	3 09 25	3. 1484	3 08 55	21
22	3. 1776	3 10 38	3. 1692	3 10 09	3. 1605	3 09 38	3. 1521	3 09 08	22
23	3. 1814	3 10 52	3. 1729	3 10 22	3. 1641	3 09 51	3. 1557	3 09 21	23
24	3. 1850	3 11 06	3. 1765	3 10 35	3. 1678	3 10 04	3. 1592	3 09 33	24
25	3. 1885	3 11 19	3. 1801	3 10 48	3. 1714	3 10 17	3. 1628	3 09 46	25
26	3. 1922	3 11 32	3. 1837	3 11 01	3. 1750	3 10 30	3. 1665	3 09 59	26
27	3. 1959	3 11 45	3. 1874	3 11 14	3. 1787	3 10 43	3. 1702	3 10 12	27
28	3. 1995	3 11 58	3. 1910	3 11 27	3. 1823	3 10 56	3. 1737	3 10 25	28
29	3. 2031	3 12 11	3. 1946	3 11 41	3. 1859	3 11 09	3. 1773	3 10 38	29
30	3. 2068	3 12 24	3. 1983	3 11 54	3. 1896	3 11 23	3. 1810	3 10 52	30
31	3. 2105	3 12 38	3. 2021	3 12 08	3. 1934	3 11 36	3. 1848	3 11 05	31
32	3. 2143	3 12 51	3. 2058	3 12 21	3. 1970	3 11 49	3. 1885	3 11 18	32
33	3. 2180	3 13 05	3. 2094	3 12 34	3. 2007	3 12 03	3. 1920	3 11 31	33
34	3. 2217	3 13 18	3. 2131	3 12 47	3. 2043	3 12 16	3. 1957	3 11 44	34
35	3. 2254	3 13 31	3. 2168	3 13 00	3. 2081	3 12 29	3. 1993	3 11 57	35
36	3. 2292	3 13 45	3. 2205	3 13 14	3. 2118	3 12 42	3. 2031	3 12 11	36
37	3. 2330	3 13 59	3. 2243	3 13 27	3. 2154	3 12 55	3. 2068	3 12 24	37
38	3. 2367	3 14 12	3. 2279	3 13 40	3. 2192	3 13 09	3. 2105	3 12 38	38
39	3. 2405	3 14 26	3. 2317	3 13 54	3. 2230	3 13 23	3. 2143	3 12 51	39
40	3. 2442	3 14 39	3. 2355	3 14 08	3. 2267	3 13 36	3. 2180	3 13 05	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$8^h\ 56^m\ 00^s$		$8^h\ 56^m\ 30^s$		$8^h\ 57^m\ 00^s$		$8^h\ 57^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
'	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	'
1	3.0701	3 04 12	3.0618	3 03 42	3.0534	3 03 12	3.0450	3 02 42	1
2	3.0735	3 04 25	3.0651	3 03 54	3.0567	3 03 24	3.0484	3 02 54	2
3	3.0769	3 04 37	3.0686	3 04 07	3.0603	3 03 37	3.0518	3 03 06	3
4	3.0804	3 04 49	3.0720	3 04 19	3.0636	3 03 50	3.0552	3 03 19	4
5	3.0839	3 05 02	3.0755	3 04 32	3.0670	3 04 02	3.0586	3 03 31	5
6	3.0873	3 05 14	3.0789	3 04 44	3.0705	3 04 14	3.0620	3 03 43	6
7	3.0908	3 05 27	3.0823	3 04 56	3.0739	3 04 26	3.0655	3 03 56	7
8	3.0943	3 05 39	3.0858	3 05 09	3.0774	3 04 39	3.0689	3 04 08	8
9	3.0977	3 05 52	3.0893	3 05 21	3.0808	3 04 51	3.0724	3 04 21	9
10	3.1011	3 06 04	3.0927	3 05 34	3.0843	3 05 03	3.0758	3 04 33	10
11	3.1047	3 06 17	3.0962	3 05 46	3.0877	3 05 16	3.0793	3 04 45	11
12	3.1081	3 06 29	3.0997	3 05 59	3.0912	3 05 28	3.0828	3 04 57	12
13	3.1116	3 06 42	3.1032	3 06 11	3.0947	3 05 41	3.0862	3 05 10	13
14	3.1152	3 06 55	3.1067	3 06 24	3.0982	3 05 54	3.0897	3 05 23	14
15	3.1187	3 07 07	3.1101	3 06 36	3.1017	3 06 06	3.0932	3 05 36	15
16	3.1222	3 07 19	3.1137	3 06 49	3.1052	3 06 19	3.0968	3 05 48	16
17	3.1256	3 07 32	3.1172	3 07 02	3.1087	3 06 31	3.1002	3 06 01	17
18	3.1293	3 07 45	3.1208	3 07 15	3.1122	3 06 44	3.1037	3 06 13	18
19	3.1327	3 07 58	3.1244	3 07 28	3.1157	3 06 57	3.1072	3 06 26	19
20	3.1364	3 08 11	3.1280	3 07 41	3.1193	3 07 09	3.1108	3 06 39	20
21	3.1399	3 08 24	3.1315	3 07 53	3.1228	3 07 22	3.1143	3 06 51	21
22	3.1435	3 08 37	3.1351	3 08 06	3.1264	3 07 35	3.1179	3 07 04	22
23	3.1471	3 08 50	3.1386	3 08 19	3.1300	3 07 48	3.1214	3 07 17	23
24	3.1507	3 09 03	3.1421	3 08 32	3.1336	3 08 01	3.1250	3 07 30	24
25	3.1543	3 09 15	3.1457	3 08 45	3.1371	3 08 14	3.1285	3 07 43	25
26	3.1579	3 09 28	3.1492	3 08 57	3.1407	3 08 27	3.1321	3 07 56	26
27	3.1616	3 09 42	3.1530	3 09 10	3.1443	3 08 39	3.1357	3 08 09	27
28	3.1651	3 09 54	3.1565	3 09 23	3.1479	3 08 52	3.1393	3 08 22	28
29	3.1688	3 10 07	3.1603	3 09 37	3.1515	3 09 05	3.1429	3 08 34	29
30	3.1725	3 10 21	3.1638	3 09 50	3.1552	3 09 18	3.1465	3 08 47	30
31	3.1762	3 10 34	3.1675	3 10 03	3.1588	3 09 32	3.1502	3 09 01	31
32	3.1797	3 10 47	3.1711	3 10 16	3.1624	3 09 45	3.1538	3 09 14	32
33	3.1834	3 11 00	3.1747	3 10 29	3.1660	3 09 58	3.1574	3 09 27	33
34	3.1871	3 11 13	3.1783	3 10 42	3.1697	3 10 11	3.1611	3 09 40	34
35	3.1908	3 11 27	3.1820	3 10 55	3.1734	3 10 24	3.1647	3 09 53	35
36	3.1944	3 11 40	3.1858	3 11 09	3.1772	3 10 37	3.1684	3 10 06	36
37	3.1982	3 11 54	3.1895	3 11 22	3.1808	3 10 51	3.1721	3 10 20	37
38	3.2019	3 12 07	3.1932	3 11 36	3.1844	3 11 04	3.1757	3 10 33	38
39	3.2056	3 12 20	3.1970	3 11 49	3.1881	3 11 17	3.1794	3 10 46	39
40	3.2093	3 12 33	3.2006	3 12 02	3.1918	3 11 30	3.1831	3 10 59	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$8^h\ 58^m\ 00^s$		$8^h\ 58^m\ 30^s$		$8^h\ 59^m\ 00^s$		$8^h\ 59^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	3.0365	3 02 12	3.0284	3 01 42	3.0199	3 01 12	3.0117	3 00 42	1
2	3.0401	3 02 24	3.0317	3 01 54	3.0233	3 01 24	3.0150	3 00 54	2
3	3.0434	3 02 36	3.0352	3 02 07	3.0267	3 01 36	3.0183	3 01 06	3
4	3.0469	3 02 49	3.0385	3 02 19	3.0302	3 01 48	3.0217	3 01 18	4
5	3.0503	3 03 01	3.0419	3 02 31	3.0336	3 02 00	3.0251	3 01 30	5
6	3.0537	3 03 13	3.0452	3 02 43	3.0370	3 02 13	3.0284	3 01 43	6
7	3.0572	3 03 26	3.0488	3 02 56	3.0403	3 02 25	3.0317	3 01 55	7
8	3.0605	3 03 38	3.0522	3 03 08	3.0437	3 02 37	3.0352	3 02 08	8
9	3.0640	3 03 50	3.0556	3 03 20	3.0471	3 02 50	3.0387	3 02 20	9
10	3.0674	3 04 02	3.0590	3 03 32	3.0506	3 03 02	3.0421	3 02 32	10
11	3.0709	3 04 15	3.0624	3 03 45	3.0540	3 03 14	3.0455	3 02 44	11
12	3.0744	3 04 28	3.0659	3 03 57	3.0574	3 03 27	3.0489	3 02 56	12
13	3.0778	3 04 40	3.0694	3 04 10	3.0610	3 03 40	3.0524	3 03 09	13
14	3.0813	3 04 53	3.0728	3 04 22	3.0644	3 03 52	3.0558	3 03 21	14
15	3.0848	3 05 05	3.0763	3 04 35	3.0678	3 04 04	3.0593	3 03 34	15
16	3.0883	3 05 18	3.0798	3 04 47	3.0713	3 04 16	3.0628	3 03 46	16
17	3.0917	3 05 30	3.0832	3 04 59	3.0748	3 04 29	3.0663	3 03 59	17
18	3.0952	3 05 43	3.0867	3 05 12	3.0782	3 04 42	3.0698	3 04 11	18
19	3.0987	3 05 55	3.0902	3 05 25	3.0817	3 04 54	3.0733	3 04 24	19
20	3.1022	3 06 08	3.0938	3 05 38	3.0852	3 05 07	3.0767	3 04 36	20
21	3.1057	3 06 21	3.0972	3 05 50	3.0887	3 05 19	3.0802	3 04 49	21
22	3.1094	3 06 34	3.1008	3 06 03	3.0922	3 05 32	3.0838	3 05 02	22
23	3.1127	3 06 46	3.1043	3 06 15	3.0956	3 05 44	3.0873	3 05 14	23
24	3.1164	3 06 59	3.1079	3 06 28	3.0992	3 05 57	3.0908	3 05 26	24
25	3.1200	3 07 12	3.1114	3 06 41	3.1028	3 06 10	3.0943	3 05 39	25
26	3.1236	3 07 25	3.1150	3 06 54	3.1064	3 06 23	3.0979	3 05 52	26
27	3.1272	3 07 38	3.1186	3 07 07	3.1100	3 06 36	3.1015	3 06 05	27
28	3.1307	3 07 51	3.1221	3 07 19	3.1136	3 06 49	3.1050	3 06 18	28
29	3.1343	3 08 03	3.1257	3 07 32	3.1172	3 07 02	3.1086	3 06 31	29
30	3.1379	3 08 16	3.1293	3 07 45	3.1207	3 07 15	3.1121	3 06 43	30
31	3.1416	3 08 29	3.1329	3 07 58	3.1243	3 07 27	3.1157	3 06 56	31
32	3.1451	3 08 42	3.1365	3 08 11	3.1280	3 07 40	3.1192	3 07 09	32
33	3.1488	3 08 55	3.1401	3 08 24	3.1315	3 07 53	3.1229	3 07 22	33
34	3.1524	3 09 08	3.1437	3 08 37	3.1351	3 08 06	3.1265	3 07 35	34
35	3.1560	3 09 21	3.1474	3 08 51	3.1388	3 08 20	3.1301	3 07 48	35
36	3.1597	3 09 35	3.1511	3 09 04	3.1425	3 08 33	3.1338	3 08 01	36
37	3.1634	3 09 48	3.1547	3 09 17	3.1460	3 08 46	3.1374	3 08 14	37
38	3.1671	3 10 01	3.1584	3 09 30	3.1496	3 08 59	3.1410	3 08 27	38
39	3.1708	3 10 14	3.1621	3 09 43	3.1533	3 09 12	3.1447	3 08 41	39
40	3.1743	3 10 27	3.1657	3 09 56	3.1570	3 09 25	3.1483	3 08 54	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$9^h\ 00^m\ 00^s$		$9^h\ 00^m\ 30^s$		$9^h\ 01^m\ 00^s$		$9^h\ 01^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	3.0033	3 00 12	2.9950	2 59 42	2.9866	2 59 12	2.9783	2 58 42	1
2	3.0066	3 00 24	2.9983	2 59 54	2.9899	2 59 25	2.9816	2 58 54	2
3	3.0100	3 00 36	3.0017	3 00 06	2.9932	2 59 37	2.9850	2 59 06	3
4	3.0133	3 00 48	3.0050	3 00 18	2.9966	2 59 48	2.9883	2 59 18	4
5	3.0167	3 01 00	3.0084	3 00 30	3.0000	3 00 00	2.9917	2 59 30	5
6	3.0200	3 01 12	3.0117	3 00 42	3.0034	3 00 12	2.9949	2 59 42	6
7	3.0235	3 01 24	3.0151	3 00 54	3.0067	3 00 24	2.9984	2 59 54	7
8	3.0269	3 01 36	3.0185	3 01 07	3.0102	3 00 36	3.0017	3 00 06	8
9	3.0303	3 01 49	3.0219	3 01 19	3.0135	3 00 49	3.0051	3 00 18	9
10	3.0336	3 02 01	3.0253	3 01 31	3.0168	3 01 01	3.0085	3 00 30	10
11	3.0371	3 02 13	3.0287	3 01 43	3.0202	3 01 13	3.0118	3 00 42	11
12	3.0406	3 02 25	3.0322	3 01 56	3.0236	3 01 25	3.0152	3 00 55	12
13	3.0440	3 02 37	3.0356	3 02 08	3.0270	3 01 37	3.0186	3 01 07	13
14	3.0473	3 02 50	3.0390	3 02 20	3.0305	3 01 49	3.0220	3 01 19	14
15	3.0508	3 03 03	3.0424	3 02 32	3.0339	3 02 02	3.0255	3 01 31	15
16	3.0543	3 03 15	3.0459	3 02 44	3.0373	3 02 14	3.0289	3 01 43	16
17	3.0577	3 03 27	3.0494	3 02 56	3.0408	3 02 27	3.0323	3 01 56	17
18	3.0612	3 03 40	3.0527	3 03 09	3.0442	3 02 40	3.0357	3 02 08	18
19	3.0647	3 03 53	3.0562	3 03 22	3.0476	3 02 52	3.0391	3 02 21	19
20	3.0682	3 04 05	3.0597	3 03 35	3.0511	3 03 04	3.0426	3 02 33	20
21	3.0716	3 04 17	3.0631	3 03 47	3.0545	3 03 16	3.0461	3 02 46	21
22	3.0751	3 04 29	3.0666	3 04 00	3.0581	3 03 29	3.0496	3 02 59	22
23	3.0786	3 04 43	3.0701	3 04 12	3.0616	3 03 42	3.0530	3 03 11	23
24	3.0821	3 04 56	3.0737	3 04 24	3.0650	3 03 55	3.0565	3 03 23	24
25	3.0856	3 05 08	3.0772	3 04 37	3.0686	3 04 07	3.0600	3 03 36	25
26	3.0892	3 05 21	3.0807	3 04 50	3.0720	3 04 19	3.0635	3 03 49	26
27	3.0927	3 05 34	3.0842	3 05 03	3.0756	3 04 33	3.0670	3 04 01	27
28	3.0963	3 05 46	3.0877	3 05 16	3.0791	3 04 45	3.0706	3 04 14	28
29	3.0998	3 05 59	3.0913	3 05 28	3.0826	3 04 58	3.0741	3 04 27	29
30	3.1034	3 06 12	3.0949	3 05 41	3.0861	3 05 10	3.0776	3 04 39	30
31	3.1070	3 06 25	3.0983	3 05 53	3.0897	3 05 23	3.0811	3 04 52	31
32	3.1106	3 06 37	3.1020	3 06 06	3.0933	3 05 36	3.0847	3 05 05	32
33	3.1142	3 06 50	3.1055	3 06 19	3.0979	3 05 49	3.0883	3 05 18	33
34	3.1178	3 07 03	3.1091	3 06 32	3.1005	3 06 01	3.0919	3 05 31	34
35	3.1212	3 07 16	3.1128	3 06 45	3.1040	3 06 14	3.0954	3 05 44	35
36	3.1249	3 07 29	3.1164	3 06 59	3.1076	3 06 27	3.0990	3 05 57	36
37	3.1286	3 07 42	3.1200	3 07 12	3.1112	3 06 40	3.1026	3 06 10	37
38	3.1322	3 07 55	3.1236	3 07 25	3.1147	3 06 54	3.1062	3 06 23	38
39	3.1358	3 08 09	3.1272	3 07 38	3.1184	3 07 07	3.1098	3 06 36	39
40	3.1395	3 08 22	3.1308	3 07 51	3.1221	3 07 20	3.1134	3 06 48	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$9^h\ 02^m\ 00^s$		$9^h\ 02^m\ 30^s$		$9^h\ 03^m\ 00^s$		$9^h\ 03^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	2.9700	2 58 12	2.9616	2 57 42	2.9532	2 57 12	2.9449	2 56 42	1
2	2.9733	2 58 24	2.9649	2 57 54	2.9565	2 57 24	2.9482	2 56 54	2
3	2.9766	2 58 36	2.9682	2 58 05	2.9599	2 57 36	2.9415	2 57 05	3
4	2.9799	2 58 48	2.9715	2 58 17	2.9632	2 57 48	2.9548	2 57 17	4
5	2.9832	2 59 00	2.9749	2 58 29	2.9664	2 57 59	2.9581	2 57 29	5
6	2.9865	2 59 12	2.9782	2 58 41	2.9697	2 58 11	2.9614	2 57 41	6
7	2.9899	2 59 24	2.9815	2 58 53	2.9731	2 58 23	2.9647	2 57 43	7
8	2.9933	2 59 36	2.9849	2 59 05	2.9765	2 58 35	2.9682	2 58 05	8
9	2.9967	2 59 48	2.9882	2 59 17	2.9798	2 58 47	2.9714	2 58 17	9
10	3.0000	3 00 00	2.9916	2 59 29	2.9831	2 58 59	2.9747	2 58 29	10
11	3.0034	3 00 12	2.9949	2 59 41	2.9865	2 59 11	2.9981	2 58 41	11
12	3.0068	3 00 24	2.9983	2 59 53	2.9898	2 59 23	2.9814	2 58 53	12
13	3.0102	3 00 37	3.0017	3 00 06	2.9932	2 59 36	2.9848	2 59 05	13
14	3.0136	3 00 49	3.0051	3 00 18	2.9966	2 59 47	2.9881	2 59 17	14
15	3.0170	3 01 01	3.0085	3 00 30	3.0000	3 00 00	2.9915	2 59 29	15
16	3.0204	3 01 13	3.0119	3 00 43	3.0034	3 00 12	2.9949	2 59 42	16
17	3.0238	3 01 25	3.0153	3 00 55	3.0068	3 00 24	2.9983	2 59 54	17
18	3.0272	3 01 38	3.0187	3 01 07	3.0102	3 00 37	3.0017	3 00 06	18
19	3.0306	3 01 50	3.0221	3 01 19	3.0136	3 00 49	3.0051	3 00 18	19
20	3.0341	3 02 02	3.0256	3 01 32	3.0170	3 01 01	3.0086	3 00 31	20
21	3.0375	3 02 14	3.0291	3 01 45	3.0204	3 01 13	3.0119	3 00 43	21
22	3.0410	3 02 27	3.0325	3 01 57	3.0239	3 01 26	3.0154	3 00 55	22
23	3.0444	3 02 40	3.0359	3 02 09	3.0274	3 01 39	3.0188	3 01 07	23
24	3.0479	3 02 52	3.0394	3 02 22	3.0308	3 01 51	3.0223	3 01 20	24
25	3.0515	3 03 05	3.0429	3 02 34	3.0343	3 02 03	3.0257	3 01 33	25
26	3.0550	3 03 18	3.0464	3 02 46	3.0377	3 02 15	3.0292	3 01 45	26
27	3.0585	3 03 30	3.0499	3 02 59	3.0412	3 02 28	3.0326	3 01 57	27
28	3.0620	3 03 43	3.0533	3 03 11	3.0447	3 02 41	3.0361	3 02 10	28
29	3.0655	3 03 55	3.0568	3 03 24	3.0482	3 02 53	3.0396	3 02 23	29
30	3.0689	3 04 08	3.0603	3 03 37	3.0517	3 03 06	3.0431	3 02 35	30
31	3.0725	3 04 21	3.0639	3 03 50	3.0552	3 03 19	3.0466	3 02 48	31
32	3.0761	3 04 34	3.0674	3 04 02	3.0587	3 03 31	3.0501	3 03 00	32
33	3.0796	3 04 46	3.0709	3 04 15	3.0622	3 03 44	3.0536	3 03 13	33
34	3.0831	3 04 59	3.0745	3 04 28	3.0658	3 03 57	3.0572	3 03 26	34
35	3.0866	3 05 12	3.0780	3 04 41	3.0693	3 04 09	3.0607	3 03 39	35
36	3.0903	3 05 25	3.0816	3 04 54	3.0729	3 04 22	3.0642	3 03 51	36
37	3.0939	3 05 38	3.0851	3 05 06	3.0764	3 04 35	3.0678	3 04 04	37
38	3.0974	3 05 50	3.0887	3 05 19	3.0800	3 04 48	3.0713	3 04 17	38
39	3.1010	3 06 03	3.0923	3 05 32	3.0836	3 05 01	3.0749	3 04 30	39
40	3.1046	3 06 16	3.0959	3 05 45	3.0872	3 05 13	3.0785	3 04 42	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$9^h\ 04^m\ 00^s$		$9^h\ 04^m\ 30^s$		$9^h\ 05^m\ 00^s$		$9^h\ 05^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	2.9366	2 56 12	2.9282	2 55 42	2.9199	2 55 12	2.9116	2 54 42	1
2	2.9399	2 56 23	2.9315	2 55 53	2.9231	2 55 23	2.9148	2 54 53	2
3	2.9432	2 56 35	2.9348	2 56 05	2.9264	2 55 35	2.9181	2 55 05	3
4	2.9464	2 56 47	2.9381	2 56 17	2.9297	2 55 47	2.9213	2 55 17	4
5	2.9497	2 56 58	2.9413	2 56 29	2.9330	2 55 59	2.9246	2 55 29	5
6	2.9529	2 57 10	2.9446	2 56 41	2.9362	2 56 10	2.9279	2 55 40	6
7	2.9563	2 57 22	2.9479	2 56 52	2.9395	2 56 22	2.9312	2 55 52	7
8	2.9597	2 57 34	2.9512	2 57 04	2.9429	2 56 34	2.9345	2 56 04	8
9	2.9628	2 57 46	2.9545	2 57 16	2.9462	2 56 46	2.9377	2 56 16	9
10	2.9662	2 57 58	2.9578	2 57 28	2.9495	2 56 58	2.9410	2 56 28	10
11	2.9696	2 58 10	2.9611	2 57 40	2.9528	2 57 10	2.9443	2 56 40	11
12	2.9730	2 58 22	2.9645	2 57 52	2.9561	2 57 22	2.9476	2 56 51	12
13	2.9764	2 58 35	2.9678	2 58 04	2.9594	2 57 34	2.9509	2 57 03	13
14	2.9797	2 58 47	2.9711	2 58 16	2.9628	2 57 46	2.9544	2 57 15	14
15	2.9831	2 58 59	2.9745	2 58 28	2.9661	2 57 58	2.9577	2 57 28	15
16	2.9864	2 59 11	2.9779	2 58 40	2.9695	2 58 10	2.9610	2 57 40	16
17	2.9898	2 59 23	2.9812	2 58 53	2.9728	2 58 22	2.9643	2 57 52	17
18	2.9932	2 59 35	2.9846	2 59 05	2.9762	2 58 34	2.9677	2 58 04	18
19	2.9965	2 59 47	2.9881	2 59 17	2.9795	2 58 46	2.9711	2 58 16	19
20	2.9998	2 59 59	2.9915	2 59 29	2.9830	2 58 59	2.9745	2 58 28	20
21	3.0034	3 00 12	2.9949	2 59 41	2.9864	2 59 11	2.9778	2 58 40	21
22	3.0068	3 00 24	2.9983	2 59 53	2.9898	2 59 23	2.9813	2 58 52	22
23	3.0103	3 00 37	3.0017	3 00 06	2.9932	2 59 35	2.9847	2 59 05	23
24	3.0137	3 00 49	3.0051	3 00 18	2.9966	2 59 48	2.9881	2 59 17	24
25	3.0171	3 01 01	3.0086	3 00 31	3.0000	3 00 00	2.9915	2 59 29	25
26	3.0206	3 01 14	3.0120	3 00 43	3.0035	3 00 13	2.9949	2 59 41	26
27	3.0240	3 01 26	3.0154	3 00 56	3.0069	3 00 25	2.9984	2 59 54	27
28	3.0274	3 01 39	3.0189	3 01 08	3.0104	3 00 37	3.0017	3 00 06	28
29	3.0310	3 01 52	3.0224	3 01 21	3.0138	3 00 50	3.0052	3 00 19	29
30	3.0344	3 02 04	3.0259	3 01 33	3.0173	3 01 02	3.0087	3 00 31	30
31	3.0379	3 02 16	3.0293	3 01 45	3.0207	3 01 15	3.0121	3 00 44	31
32	3.0414	3 02 29	3.0327	3 01 58	3.0242	3 01 27	3.0156	3 00 56	32
33	3.0449	3 02 42	3.0362	3 02 10	3.0277	3 01 40	3.0191	3 01 09	33
34	3.0485	3 02 54	3.0397	3 02 23	3.0312	3 01 52	3.0225	3 01 21	34
35	3.0519	3 03 07	3.0432	3 02 35	3.0346	3 02 05	3.0260	3 01 34	35
36	3.0555	3 03 20	3.0467	3 02 48	3.0382	3 02 18	3.0295	3 01 46	36
37	3.0591	3 03 33	3.0503	3 03 01	3.0418	3 02 30	3.0331	3 01 59	37
38	3.0626	3 03 45	3.0539	3 03 14	3.0452	3 02 43	3.0365	3 02 11	38
39	3.0662	3 03 58	3.0575	3 03 27	3.0488	3 02 56	3.0401	3 02 24	39
40	3.0697	3 04 11	3.0610	3 03 40	3.0523	3 03 08	3.0436	3 02 37	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$9^h\ 06^m\ 00^s$		$9^h\ 06^m\ 30^s$		$9^h\ 07^m\ 00^s$		$9^h\ 07^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	2.9032	2 54 12	2.8949	2 53 42	2.8866	2 53 12	2.8782	2 52 42	1
2	2.9065	2 54 23	2.8980	2 53 53	2.8898	2 53 23	2.8813	2 52 53	2
3	2.9098	2 54 35	2.9013	2 54 05	2.8931	2 53 35	2.8846	2 53 05	3
4	2.9129	2 54 46	2.9046	2 54 17	2.8962	2 53 47	2.8879	2 53 16	4
5	2.9162	2 54 58	2.9078	2 54 28	2.8994	2 53 59	2.8911	2 53 28	5
6	2.9195	2 55 10	2.9111	2 54 40	2.9027	2 54 10	2.8943	2 53 39	6
7	2.9228	2 55 22	2.9144	2 54 51	2.9060	2 54 22	2.8975	2 53 51	7
8	2.9261	2 55 34	2.9176	2 55 03	2.9092	2 54 34	2.9008	2 54 02	8
9	2.9293	2 55 45	2.9208	2 55 15	2.9124	2 54 45	2.9041	2 54 14	9
10	2.9326	2 55 57	2.9241	2 55 27	2.9157	2 54 57	2.9074	2 54 26	10
11	2.9359	2 56 09	2.9274	2 55 39	2.9190	2 55 09	2.9107	2 54 38	11
12	2.9392	2 56 21	2.9307	2 55 51	2.9223	2 55 20	2.9140	2 54 50	12
13	2.9425	2 56 33	2.9340	2 56 02	2.9255	2 55 32	2.9172	2 55 02	13
14	2.9459	2 56 45	2.9374	2 56 15	2.9289	2 55 44	2.9204	2 55 13	14
15	2.9492	2 56 57	2.9407	2 56 27	2.9322	2 55 56	2.9238	2 55 25	15
16	2.9525	2 57 09	2.9440	2 56 38	2.9355	2 56 08	2.9271	2 55 37	16
17	2.9558	2 57 21	2.9473	2 56 50	2.9388	2 56 20	2.9304	2 55 49	17
18	2.9591	2 57 33	2.9506	2 57 02	2.9421	2 56 32	2.9337	2 56 01	18
19	2.9625	2 57 45	2.9539	2 57 14	2.9454	2 56 44	2.9371	2 56 13	19
20	2.9659	2 57 57	2.9574	2 57 27	2.9488	2 56 56	2.9404	2 56 25	20
21	2.9692	2 58 09	2.9608	2 57 39	2.9522	2 57 08	2.9438	2 56 37	21
22	2.9727	2 58 22	2.9641	2 57 51	2.9557	2 57 20	2.9471	2 56 49	22
23	2.9761	2 58 34	2.9675	2 58 03	2.9590	2 57 32	2.9504	2 57 01	23
24	2.9795	2 58 46	2.9709	2 58 15	2.9623	2 57 44	2.9537	2 57 13	24
25	2.9828	2 58 58	2.9743	2 58 27	2.9657	2 57 56	2.9571	2 57 25	25
26	2.9863	2 59 11	2.9777	2 58 40	2.9691	2 58 09	2.9606	2 57 37	26
27	2.9897	2 59 23	2.9811	2 58 52	2.9726	2 58 21	2.9640	2 57 49	27
28	2.9931	2 59 35	2.9845	2 59 04	2.9760	2 58 33	2.9673	2 58 02	28
29	2.9965	2 59 47	2.9879	2 59 16	2.9793	2 58 46	2.9706	2 58 14	29
30	3.0000	3 00 00	2.9914	2 59 29	2.9828	2 58 58	2.9742	2 58 26	30
31	3.0035	3 00 13	2.9948	2 59 41	2.9863	2 59 11	2.9776	2 58 38	31
32	3.0069	3 00 25	2.9983	2 59 54	2.9897	2 59 23	2.9809	2 58 51	32
33	3.0104	3 00 37	3.0017	3 00 06	2.9931	2 59 35	2.9844	2 59 04	33
34	3.0138	3 00 50	3.0052	3 00 19	2.9966	2 59 47	2.9879	2 59 16	34
35	3.0174	3 01 03	3.0087	3 00 31	3.0000	3 00 00	2.9914	2 59 29	35
36	3.0208	3 01 15	3.0122	3 00 44	3.0035	3 00 13	2.9948	2 59 41	36
37	3.0244	3 01 28	3.0157	3 00 57	3.0069	3 00 25	2.9983	2 59 54	37
38	3.0278	3 01 40	3.0191	3 01 09	3.0104	3 00 38	3.0017	3 00 06	38
39	3.0314	3 01 53	3.0226	3 01 22	3.0139	3 00 50	3.0052	3 00 19	39
40	3.0349	3 02 06	3.0261	3 01 34	3.0175	3 01 03	3.0087	3 00 31	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$9^h\ 08^m\ 00^s$		$9^h\ 08^m\ 30^s$		$9^h\ 09^m\ 00^s$		$9^h\ 09^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
'	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	'
1	2.8699	2 52 12	2.8616	2 51 42	2.8532	2 51 12	2.8448	2 50 41	1
2	2.8731	2 52 23	2.8648	2 51 53	2.8563	2 51 23	2.8480	2 50 53	2
3	2.8763	2 52 35	2.8679	2 52 04	2.8596	2 51 34	2.8512	2 51 05	3
4	2.8793	2 52 46	2.8711	2 52 16	2.8628	2 51 46	2.8543	2 51 17	4
5	2.8826	2 52 57	2.8744	2 52 28	2.8660	2 51 58	2.8575	2 51 29	5
6	2.8859	2 53 09	2.8776	2 52 39	2.8691	2 52 09	2.8607	2 51 40	6
7	2.8892	2 53 21	2.8808	2 52 51	2.8723	2 52 20	2.8640	2 51 51	7
8	2.8924	2 53 33	2.8839	2 53 02	2.8756	2 52 32	2.8672	2 52 02	8
9	2.8956	2 53 44	2.8872	2 53 14	2.8788	2 52 44	2.8704	2 52 14	9
10	2.8988	2 53 56	2.8905	2 53 26	2.8821	2 52 55	2.8736	2 52 25	10
11	2.9021	2 54 08	2.8938	2 53 38	2.8853	2 53 07	2.8769	2 52 37	11
12	2.9054	2 54 19	2.8970	2 53 49	2.8886	2 53 19	2.8808	2 52 49	12
13	2.9087	2 54 31	2.9003	2 54 01	2.8918	2 53 30	2.8840	2 53 00	13
14	2.9120	2 54 43	2.9035	2 54 13	2.8951	2 53 42	2.8872	2 53 12	14
15	2.9153	2 54 55	2.9068	2 54 24	2.8983	2 53 54	2.8905	2 53 24	15
16	2.9186	2 55 07	2.9101	2 54 36	2.9016	2 54 06	2.8938	2 53 36	16
17	2.9219	2 55 19	2.9133	2 54 48	2.9049	2 54 18	2.8970	2 53 48	17
18	2.9252	2 55 31	2.9166	2 55 00	2.9081	2 54 29	2.9001	2 53 59	18
19	2.9285	2 55 43	2.9199	2 55 12	2.9114	2 54 41	2.9032	2 54 11	19
20	2.9318	2 55 54	2.9233	2 55 24	2.9148	2 54 52	2.9064	2 54 22	20
21	2.9351	2 56 06	2.9267	2 55 36	2.9181	2 55 04	2.9096	2 54 34	21
22	2.9385	2 56 18	2.9301	2 55 48	2.9214	2 55 17	2.9130	2 54 47	22
23	2.9418	2 56 30	2.9334	2 56 00	2.9248	2 55 29	2.9163	2 54 59	23
24	2.9452	2 56 43	2.9368	2 56 12	2.9282	2 55 41	2.9196	2 55 11	24
25	2.9486	2 56 55	2.9401	2 56 24	2.9315	2 55 53	2.9229	2 55 23	25
26	2.9520	2 57 07	2.9434	2 56 36	2.9348	2 56 05	2.9262	2 55 35	26
27	2.9554	2 57 19	2.9467	2 56 48	2.9382	2 56 17	2.9295	2 55 47	27
28	2.9587	2 57 31	2.9501	2 57 00	2.9415	2 56 29	2.9329	2 55 59	28
29	2.9620	2 57 43	2.9535	2 57 12	2.9448	2 56 41	2.9363	2 56 11	29
30	2.9655	2 57 56	2.9570	2 57 25	2.9483	2 56 53	2.9397	2 56 23	30
31	2.9690	2 58 08	2.9604	2 57 37	2.9517	2 57 06	2.9431	2 56 35	31
32	2.9723	2 58 20	2.9638	2 57 49	2.9550	2 57 18	2.9465	2 56 47	32
33	2.9757	2 58 33	2.9672	2 58 02	2.9584	2 57 30	2.9500	2 56 59	33
34	2.9793	2 58 45	2.9706	2 58 14	2.9619	2 57 42	2.9533	2 57 11	34
35	2.9827	2 58 57	2.9740	2 58 26	2.9653	2 57 55	2.9567	2 57 24	35
36	2.9862	2 59 10	2.9775	2 58 39	2.9688	2 58 07	2.9601	2 57 36	36
37	2.9896	2 59 23	2.9809	2 58 51	2.9723	2 58 20	2.9634	2 57 49	37
38	2.9930	2 59 35	2.9893	2 59 04	2.9756	2 58 32	2.9669	2 58 01	38
39	2.9965	2 59 48	2.9879	2 59 16	2.9792	2 58 45	2.9704	2 58 14	39
40	2.9999	3 00 00	2.9913	2 59 28	2.9826	2 58 57	2.9738	2 58 26	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$9^h\ 10^m\ 00^s$		$9^h\ 10^m\ 30^s$		$9^h\ 11^m\ 00^s$		$9^h\ 11^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	2.8365	2 50 12	2.8282	2 49 42	2.8198	2 49 11	2.8115	2 48 41	1
2	2.8397	2 50 23	2.8314	2 49 53	2.8229	2 49 22	2.8147	2 48 53	2
3	2.8429	2 50 34	2.8346	2 50 05	2.8261	2 49 33	2.8179	2 49 04	3
4	2.8460	2 50 45	2.8378	2 50 16	2.8292	2 49 44	2.8210	2 49 16	4
5	2.8492	2 50 57	2.8409	2 50 27	2.8324	2 49 56	2.8241	2 49 27	5
6	2.8524	2 51 09	2.8440	2 50 38	2.8356	2 50 08	2.8272	2 49 38	6
7	2.8556	2 51 20	2.8472	2 50 50	2.8388	2 50 20	2.8304	2 49 49	7
8	2.8588	2 51 32	2.8504	2 51 01	2.8420	2 50 32	2.8336	2 50 01	8
9	2.8620	2 51 43	2.8536	2 51 12	2.8451	2 50 43	2.8368	2 50 13	9
10	2.8652	2 51 55	2.8568	2 51 24	2.8483	2 50 55	2.8400	2 50 24	10
11	2.8685	2 52 07	2.8600	2 51 35	2.8516	2 51 07	2.8432	2 50 36	11
12	2.8717	2 52 18	2.8632	2 51 47	2.8548	2 51 18	2.8463	2 50 47	12
13	2.8748	2 52 29	2.8665	2 51 59	2.8580	2 51 30	2.8495	2 50 59	13
14	2.8780	2 52 41	2.8698	2 52 10	2.8612	2 51 42	2.8527	2 51 11	14
15	2.8813	2 52 53	2.8730	2 52 22	2.8645	2 51 54	2.8560	2 51 23	15
16	2.8846	2 53 04	2.8762	2 52 34	2.8677	2 52 06	2.8593	2 51 35	16
17	2.8879	2 53 16	2.8794	2 52 45	2.8710	2 52 17	2.8625	2 51 46	17
18	2.8912	2 53 28	2.8827	2 52 57	2.8742	2 52 28	2.8657	2 51 57	18
19	2.8945	2 53 40	2.8860	2 53 09	2.8774	2 52 39	2.8689	2 52 08	19
20	2.8978	2 53 52	2.8892	2 53 21	2.8807	2 52 51	2.8722	2 52 20	20
21	2.9011	2 54 04	2.8925	2 53 33	2.8839	2 53 02	2.8755	2 52 31	21
22	2.9045	2 54 16	2.8958	2 53 45	2.8872	2 53 13	2.8788	2 52 43	22
23	2.9078	2 54 28	2.8991	2 53 57	2.8905	2 53 25	2.8820	2 52 55	23
24	2.9110	2 54 40	2.9024	2 54 09	2.8938	2 53 37	2.8853	2 53 07	24
25	2.9143	2 54 51	2.9057	2 54 20	2.8971	2 53 49	2.8886	2 53 19	25
26	2.9176	2 55 03	2.9090	2 54 32	2.9004	2 54 01	2.8919	2 53 31	26
27	2.9209	2 55 15	2.9124	2 54 44	2.9037	2 54 13	2.8952	2 53 43	27
28	2.9242	2 55 27	2.9157	2 54 56	2.9070	2 54 25	2.8985	2 53 55	28
29	2.9276	2 55 39	2.9191	2 55 09	2.9104	2 54 37	2.9018	2 54 06	29
30	2.9310	2 55 52	2.9225	2 55 21	2.9138	2 54 50	2.9052	2 54 19	30
31	2.9344	2 56 04	2.9258	2 55 33	2.9172	2 55 02	2.9086	2 54 31	31
32	2.9378	2 56 16	2.9292	2 55 45	2.9206	2 55 14	2.9120	2 54 43	32
33	2.9411	2 56 28	2.9325	2 55 57	2.9239	2 55 26	2.9153	2 54 55	33
34	2.9445	2 56 40	2.9358	2 56 09	2.9272	2 55 38	2.9186	2 55 07	34
35	2.9479	2 56 52	2.9391	2 56 22	2.9306	2 55 50	2.9220	2 55 19	35
36	2.9514	2 57 05	2.9426	2 56 34	2.9341	2 56 03	2.9254	2 55 31	36
37	2.9548	2 57 17	2.9461	2 56 46	2.9375	2 56 15	2.9288	2 55 44	37
38	2.9582	2 57 30	2.9495	2 56 58	2.9408	2 56 27	2.9322	2 55 56	38
39	2.9617	2 57 42	2.9529	2 57 11	2.9442	2 56 39	2.9356	2 56 08	39
40	2.9652	2 57 55	2.9563	2 57 23	2.9476	2 56 51	2.9390	2 56 20	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$9^h\ 12^m\ 00^s$		$9^h\ 12^m\ 30^s$		$9^h\ 13^m\ 00^s$		$9^h\ 13^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
	Hours.	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	
1	2.8031	2 48 11	2.7948	2 47 41	2.7865	2 47 11	2.7781	2 46 41	1
2	2.8062	2 48 22	2.7979	2 47 52	2.7895	2 47 23	2.7812	2 46 52	2
3	2.8094	2 48 33	2.8010	2 48 03	2.7927	2 47 34	2.7843	2 47 03	3
4	2.8126	2 48 44	2.8042	2 48 15	2.7958	2 47 45	2.7874	2 47 14	4
5	2.8157	2 48 56	2.8073	2 48 27	2.7989	2 47 56	2.7906	2 47 26	5
6	2.8188	2 49 07	2.8104	2 48 38	2.8020	2 48 07	2.7937	2 47 37	6
7	2.8219	2 49 19	2.8136	2 48 50	2.8052	2 48 18	2.7968	2 47 48	7
8	2.8251	2 49 31	2.8167	2 49 01	2.8083	2 48 30	2.8000	2 48 00	8
9	2.8283	2 49 42	2.8199	2 49 12	2.8115	2 48 41	2.8031	2 48 11	9
10	2.8315	2 49 53	2.8231	2 49 23	2.8146	2 48 53	2.8062	2 48 23	10
11	2.8347	2 50 04	2.8262	2 49 34	2.8178	2 49 04	2.8094	2 48 34	11
12	2.8379	2 50 16	2.8294	2 49 46	2.8210	2 49 15	2.8125	2 48 45	12
13	2.8411	2 50 28	2.8326	2 49 57	2.8242	2 49 27	2.8158	2 48 57	13
14	2.8443	2 50 39	2.8358	2 50 09	2.8273	2 49 38	2.8189	2 49 08	14
15	2.8475	2 50 51	2.8390	2 50 20	2.8306	2 49 50	2.8221	2 49 20	15
16	2.8507	2 51 03	2.8422	2 50 32	2.8338	2 50 01	2.8253	2 49 31	16
17	2.8539	2 51 14	2.8455	2 50 44	2.8369	2 50 13	2.8284	2 49 42	17
18	2.8571	2 51 26	2.8487	2 50 55	2.8401	2 50 24	2.8316	2 49 54	18
19	2.8604	2 51 37	2.8519	2 51 07	2.8434	2 50 36	2.8319	2 50 06	19
20	2.8636	2 51 49	2.8551	2 51 18	2.8466	2 50 47	2.8381	2 50 17	20
21	2.8668	2 52 00	2.8584	2 51 30	2.8498	2 50 59	2.8413	2 50 29	21
22	2.8701	2 52 12	2.8617	2 51 42	2.8531	2 51 11	2.8446	2 50 41	22
23	2.8734	2 52 24	2.8649	2 51 54	2.8563	2 51 22	2.8478	2 50 52	23
24	2.8767	2 52 36	2.8681	2 52 05	2.8597	2 51 34	2.8511	2 51 04	24
25	2.8800	2 52 48	2.8714	2 52 17	2.8629	2 51 46	2.8542	2 51 15	25
26	2.8833	2 53 00	2.8747	2 52 29	2.8662	2 51 58	2.8575	2 51 27	26
27	2.8866	2 53 12	2.8780	2 52 41	2.8695	2 52 10	2.8609	2 51 39	27
28	2.8899	2 53 24	2.8813	2 52 53	2.8727	2 52 22	2.8641	2 51 51	28
29	2.8932	2 53 36	2.8846	2 53 05	2.8760	2 52 34	2.8674	2 52 03	29
30	2.8965	2 53 48	2.8879	2 53 17	2.8793	2 52 46	2.8707	2 52 15	30
31	2.8999	2 54 00	2.8912	2 53 29	2.8826	2 52 58	2.8740	2 52 27	31
32	2.9032	2 54 12	2.8946	2 53 41	2.8860	2 53 10	2.8774	2 52 39	32
33	2.9066	2 54 24	2.8979	2 53 53	2.8893	2 53 22	2.8807	2 52 51	33
34	2.9100	2 54 36	2.9013	2 54 05	2.8926	2 53 33	2.8840	2 53 02	34
35	2.9133	2 54 48	2.9047	2 54 17	2.8959	2 53 45	2.8873	2 53 14	35
36	2.9166	2 55 00	2.9080	2 54 29	2.8993	2 53 57	2.8907	2 53 26	36
37	2.9200	2 55 12	2.9114	2 54 41	2.9026	2 54 09	2.8940	2 53 38	37
38	2.9234	2 55 24	2.9148	2 54 53	2.9060	2 54 21	2.8973	2 53 50	38
39	2.9268	2 55 36	2.9182	2 55 05	2.9094	2 54 34	2.9008	2 54 03	39
40	2.9302	2 55 49	2.9216	2 55 18	2.9128	2 54 46	2.9041	2 54 15	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$9^h\ 14^m\ 00^s$		$9^h\ 14^m\ 30^s$		$9^h\ 15^m\ 00^s$		$9^h\ 15^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	2.7697	2 46 11	2.7614	2 45 41	2.7531	2 45 11	2.7447	2 44 41	1
2	2.7728	2 46 22	2.7645	2 45 52	2.7561	2 45 22	2.7478	2 44 52	2
3	2.7758	2 46 33	2.7676	2 46 03	2.7593	2 45 33	2.7509	2 45 03	3
4	2.7790	2 46 45	2.7706	2 46 15	2.7623	2 45 44	2.7539	2 45 14	4
5	2.7822	2 46 56	2.7738	2 46 26	2.7654	2 45 55	2.7570	2 45 25	5
6	2.7853	2 47 07	2.7768	2 46 37	2.7685	2 46 07	2.7601	2 45 36	6
7	2.7884	2 47 18	2.7800	2 46 48	2.7716	2 46 18	2.7632	2 45 47	7
8	2.7915	2 47 29	2.7830	2 46 59	2.7746	2 46 29	2.7663	2 45 58	8
9	2.7946	2 47 41	2.7861	2 47 11	2.7778	2 46 40	2.7694	2 46 09	9
10	2.7977	2 47 52	2.7893	2 47 22	2.7809	2 46 51	2.7725	2 46 21	10
11	2.8010	2 48 03	2.7925	2 47 33	2.7841	2 47 03	2.7756	2 46 32	11
12	2.8041	2 48 15	2.7956	2 47 45	2.7872	2 47 14	2.7788	2 46 43	12
13	2.8072	2 48 26	2.7988	2 47 56	2.7904	2 47 25	2.7819	2 46 54	13
14	2.8104	2 48 38	2.8019	2 48 07	2.7936	2 47 37	2.7851	2 47 06	14
15	2.8136	2 48 49	2.8052	2 48 19	2.7967	2 47 48	2.7882	2 47 17	15
16	2.8168	2 49 00	2.8083	2 48 30	2.7999	2 48 00	2.7913	2 47 28	16
17	2.8199	2 49 12	2.8115	2 48 41	2.8030	2 48 11	2.7945	2 47 40	17
18	2.8232	2 49 24	2.8147	2 48 53	2.8061	2 48 22	2.7976	2 47 51	18
19	2.8263	2 49 35	2.8178	2 49 04	2.8093	2 48 33	2.8008	2 48 02	19
20	2.8295	2 49 46	2.8210	2 49 16	2.8125	2 48 45	2.8040	2 48 14	20
21	2.8327	2 49 58	2.8242	2 49 27	2.8158	2 48 57	2.8072	2 48 25	21
22	2.8360	2 50 10	2.8275	2 49 39	2.8189	2 49 08	2.8104	2 48 37	22
23	2.8392	2 50 21	2.8307	2 49 51	2.8221	2 49 20	2.8136	2 48 48	23
24	2.8425	2 50 33	2.8340	2 50 02	2.8254	2 49 31	2.8168	2 48 59	24
25	2.8458	2 50 45	2.8372	2 50 14	2.8285	2 49 43	2.8200	2 49 11	25
26	2.8490	2 50 56	2.8404	2 50 25	2.8318	2 49 54	2.8233	2 49 23	26
27	2.8522	2 51 08	2.8436	2 50 37	2.8351	2 50 07	2.8265	2 49 35	27
28	2.8555	2 51 20	2.8468	2 50 48	2.8384	2 50 18	2.8297	2 49 47	28
29	2.8588	2 51 32	2.8501	2 51 00	2.8416	2 50 30	2.8329	2 49 59	29
30	2.8621	2 51 44	2.8534	2 51 12	2.8449	2 50 42	2.8362	2 50 10	30
31	2.8654	2 51 55	2.8567	2 51 24	2.8481	2 50 53	2.8395	2 50 22	31
32	2.8687	2 52 07	2.8600	2 51 36	2.8514	2 51 05	2.8428	2 50 34	32
33	2.8720	2 52 19	2.8633	2 51 48	2.8547	2 51 17	2.8460	2 50 46	33
34	2.8753	2 52 31	2.8666	2 52 00	2.8580	2 51 29	2.8493	2 50 57	34
35	2.8787	2 52 43	2.8699	2 52 12	2.8613	2 51 41	2.8526	2 51 09	35
36	2.8820	2 52 55	2.8733	2 52 24	2.8646	2 51 53	2.8559	2 51 21	36
37	2.8853	2 53 07	2.8767	2 52 36	2.8679	2 52 04	2.8593	2 51 33	37
38	2.8886	2 53 19	2.8800	2 52 48	2.8712	2 52 16	2.8626	2 51 45	38
39	2.8920	2 53 31	2.8833	2 53 00	2.8745	2 52 28	2.8659	2 51 57	39
40	2.8954	2 53 43	2.8867	2 53 12	2.8779	2 52 40	2.8692	2 52 09	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$9^h\ 16^m\ 00^s$		$9^h\ 16^m\ 30^s$		$9^h\ 17^m\ 00^s$		$9^h\ 17^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	2. 7364	2 44 11	2. 7280	2 43 41	2. 7197	2 43 11	2. 7114	2 42 41	1
2	2. 7394	2 44 22	2. 7310	2 43 52	2. 7227	2 43 22	2. 7144	2 42 52	2
3	2. 7425	2 44 33	2. 7341	2 44 03	2. 7257	2 43 33	2. 7174	2 43 03	3
4	2. 7455	2 44 44	2. 7372	2 44 14	2. 7288	2 43 44	2. 7205	2 43 14	4
5	2. 7486	2 44 55	2. 7402	2 44 25	2. 7319	2 43 55	2. 7235	2 43 25	5
6	2. 7517	2 45 06	2. 7433	2 44 35	2. 7349	2 44 06	2. 7266	2 43 36	6
7	2. 7548	2 45 17	2. 7464	2 44 47	2. 7380	4 44 17	2. 7296	2 43 47	7
8	2. 7578	2 45 28	2. 7494	2 44 58	2. 7411	2 44 28	2. 7327	2 43 58	8
9	2. 7609	2 45 39	2. 7525	2 45 09	2. 7441	2 44 39	2. 7357	2 44 09	9
10	2. 7640	2 45 50	2. 7556	2 45 20	2. 7472	2 44 50	2. 7388	2 44 20	10
11	2. 7671	2 46 02	2. 7587	2 45 31	2. 7503	2 45 01	2. 7419	2 44 31	11
12	2. 7702	2 46 13	2. 7618	2 45 42	2. 7534	2 45 12	2. 7450	2 44 42	12
13	2. 7734	2 46 24	2. 7649	2 45 54	2. 7565	2 45 23	2. 7481	2 44 53	13
14	2. 7765	2 46 35	2. 7681	2 46 05	2. 7597	2 45 35	2. 7512	2 45 04	14
15	2. 7797	2 46 47	2. 7712	2 46 16	2. 7627	2 45 46	2. 7543	2 45 15	15
16	2. 7828	2 46 58	2. 7743	2 46 27	2. 7659	2 45 57	2. 7574	2 45 27	16
17	2. 7860	2 47 10	2. 7775	2 46 39	2. 7690	2 46 08	2. 7605	2 45 38	17
18	2. 7891	2 47 21	2. 7806	2 46 50	2. 7721	2 46 20	2. 7636	2 45 49	18
19	2. 7923	2 47 32	2. 7838	2 47 02	2. 7753	2 46 31	2. 7667	2 46 00	19
20	2. 7955	2 47 44	2. 7869	2 47 13	2. 7785	2 46 43	2. 7699	2 46 12	20
21	2. 7986	2 47 55	2. 7901	2 47 24	2. 7816	2 46 54	2. 7730	2 46 23	21
22	2. 8018	2 48 06	2. 7933	2 47 36	2. 7848	2 47 05	2. 7763	2 46 35	22
23	2. 8050	2 48 18	2. 7965	2 47 47	2. 7879	2 47 16	2. 7793	2 46 45	23
24	2. 8082	2 48 30	2. 7997	2 47 59	2. 7911	2 47 28	2. 7826	2 46 57	24
25	2. 8114	2 48 41	2. 8029	2 48 10	2. 7943	2 47 39	2. 7858	2 47 09	25
26	2. 8146	2 48 53	2. 8061	2 48 22	2. 7975	2 47 51	2. 7890	2 47 20	26
27	2. 8179	2 49 04	2. 8093	2 48 33	2. 8007	2 48 02	2. 7921	2 47 32	27
28	2. 8211	2 49 16	2. 8125	2 48 45	2. 8039	2 48 14	2. 7953	2 47 43	28
29	2. 8243	2 49 27	2. 8157	2 48 57	2. 8071	2 48 26	2. 7985	2 47 55	29
30	2. 8276	2 49 39	2. 8190	2 49 08	2. 8103	2 48 37	2. 8017	2 48 06	30
31	2. 8308	2 49 51	2. 8222	2 49 20	2. 8136	2 48 49	2. 8050	2 48 18	31
32	2. 8341	2 50 03	2. 8255	2 49 32	2. 8168	2 49 00	2. 8082	2 48 30	32
33	2. 8374	2 50 15	2. 8287	2 49 43	2. 8200	2 49 12	2. 8115	2 48 41	33
34	2. 8406	2 50 26	2. 8320	2 49 55	2. 8233	2 49 24	2. 8147	2 48 53	34
35	2. 8439	2 50 38	2. 8352	2 50 07	2. 8266	2 49 36	2. 8180	2 49 05	35
36	2. 8472	2 50 50	2. 8385	2 50 19	2. 8299	2 49 48	2. 8212	2 49 16	36
37	2. 8505	2 51 02	2. 8418	2 50 30	2. 8331	2 49 59	2. 8245	2 49 28	37
38	2. 8538	2 51 14	2. 8451	2 50 42	2. 8364	2 50 11	2. 8278	2 49 40	38
39	2. 8571	2 51 26	2. 8484	2 50 54	2. 8398	2 50 23	2. 8310	2 49 52	39
40	2. 8605	2 51 38	2. 8517	2 51 06	2. 8431	2 50 35	2. 8343	2 50 03	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$9^h\ 18^m\ 00^s$		$9^h\ 18^m\ 30^s$		$9^h\ 19^m\ 00^s$		$9^h\ 19^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	2. 7030	2 42 11	2. 6947	2 41 41	2. 6864	2 41 11	2. 6780	2 40 40	1
2	2. 7060	2 42 22	2. 6977	2 41 51	2. 6893	2 41 22	2. 6809	2 40 51	2
3	2. 7091	2 42 33	2. 7007	2 42 02	2. 6923	2 41 33	2. 6839	2 41 02	3
4	2. 7120	2 42 43	2. 7037	2 42 13	2. 6954	2 41 44	2. 6870	2 41 13	4
5	2. 7151	2 42 54	2. 7067	2 42 24	2. 6984	2 41 55	2. 6900	2 41 24	5
6	2. 7182	2 43 06	2. 7098	2 42 35	2. 7013	2 42 05	2. 6929	2 41 35	6
7	2. 7212	2 43 16	2. 7128	2 42 46	2. 7044	2 42 16	2. 6960	2 41 46	7
8	2. 7243	2 43 27	2. 7158	2 42 57	2. 7074	2 42 27	2. 6990	2 41 57	8
9	2. 7273	2 43 38	2. 7188	2 43 08	2. 7104	2 42 37	2. 7020	2 42 07	9
10	2. 7304	2 43 49	2. 7219	2 43 19	2. 7135	2 42 48	2. 7051	2 42 18	10
11	2. 7334	2 44 00	2. 7250	2 43 30	2. 7166	2 42 59	2. 7082	2 42 29	11
12	2. 7365	2 44 11	2. 7280	2 43 41	2. 7197	2 43 10	2. 7113	2 42 40	12
13	2. 7396	2 44 23	2. 7311	2 43 52	2. 7227	2 43 21	2. 7143	2 42 51	13
14	2. 7427	2 44 34	2. 7342	2 44 03	2. 7258	2 43 32	2. 7173	2 43 02	14
15	2. 7458	2 44 45	2. 7373	2 44 14	2. 7289	2 43 43	2. 7203	2 43 13	15
16	2. 7489	2 44 56	2. 7403	2 44 25	2. 7320	2 43 54	2. 7234	2 43 24	16
17	2. 7520	2 45 07	2. 7435	2 44 37	2. 7350	2 44 06	2. 7265	2 43 35	17
18	2. 7551	2 45 18	2. 7466	2 44 48	2. 7382	2 44 17	2. 7296	2 43 46	18
19	2. 7582	2 45 30	2. 7497	2 44 59	2. 7412	2 44 28	2. 7326	2 43 57	19
20	2. 7614	2 45 41	2. 7528	2 45 10	2. 7443	2 44 39	2. 7359	2 44 09	20
21	2. 7646	2 45 53	2. 7560	2 45 21	2. 7475	2 44 50	2. 7389	2 44 20	21
22	2. 7677	2 46 04	2. 7591	2 45 33	2. 7506	2 45 01	2. 7420	2 44 31	22
23	2. 7708	2 46 15	2. 7623	2 45 44	2. 7537	2 45 13	2. 7452	2 44 42	23
24	2. 7740	2 46 27	2. 7654	2 45 55	2. 7569	2 45 25	2. 7483	2 44 54	24
25	2. 7772	2 46 38	2. 7686	2 46 07	2. 7600	2 45 36	2. 7515	2 45 05	25
26	2. 7803	2 46 49	2. 7718	2 46 18	2. 7632.	2 45 47	2. 7546	2 45 17	26
27	2. 7835	2 47 00	2. 7750	2 46 30	2. 7663	2 45 58	2. 7577	2 45 28	27
28	2. 7867	2 47 12	2. 7781	2 46 41	2. 7694	2 46 09	2. 7609	2 45 39	28
29	2. 7900	2 47 24	2. 7813	2 46 53	2. 7726	2 46 21	2. 7641	2 45 50	29
30	2. 7931	2 47 35	2. 7845	2 47 04	2. 7758	2 46 33	2. 7673	2 46 02	30
31	2. 7963	2 47 47	2. 7877	2 47. 16	2. 7791	2 46 45	2. 7704	2 46 13	31
32	2. 7996	2 47 59	2. 7909	2 47 27	2. 7823	2 46 56	2. 7736	2 46 25	32
33	2. 8028	2 48 10	2. 7941	2 47 39	2. 7855	2 47 07	2. 7768	2 46 36	33
34	2. 8060	2 48 22	2. 7973	2 47 50	2 7887	2 47 18	2. 7801	2 46 47	34
35	2. 8093	2 48 33	2. 8005	2 48 02	2. 7918	2 47 30	2. 7832	2 46 58	35
36	2. 8126	2 48 45	2. 8038	2 48 14	2. 7952	2 47 42	2. 7866	2 47 11	36
37	2. 8159	2 48 57	2. 8071	2 48 26	2. 7983	2 47 54	2. 7898	2 47 13	37
38	2. 8191	2 49 08	2. 8104	2 48 37	2. 8016	2 48 05	2. 7929	2 47 24	38
39	2. 8223	2 49 20	2. 8136	2 48 49	2. 8049	2 48 17	2. 7962	2 47 35	39
40	2. 8256	2 49 32	2. 8169	2 49 00	2. 8081	2 48 29	2. 7994	2 47 57	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$9^h\ 20^m\ 00^s$		$9^h\ 20^m\ 30^s$		$9^h\ 21^m\ 00^s$		$9^h\ 21^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	2.6697	2 40 11	2.6613	2 39 41	2.6529	2 39 10	2.6446	2 38 41	1
2	2.6726	2 40 22	2.6642	2 39 51	2.6559	2 39 21	2.6475	2 38 51	2
3	2.6756	2 40 32	2.6672	2 40 01	2.6589	2 39 32	2.6505	2 39 02	3
4	2.6786	2 40 43	2.6702	2 40 12	2.6618	2 39 42	2.6535	2 39 13	4
5	2.6816	2 40 54	2.6732	2 40 23	2.6648	2 39 53	2.6564	2 39 23	5
6	2.6846	2 41 05	2.6762	2 40 34	2.6677	2 40 04	2.6594	2 39 34	6
7	2.6876	2 41 16	2.6792	2 40 45	2.6707	2 40 15	2.6623	2 39 44	7
8	2.6906	2 41 27	2.6822	2 40 55	2.6737	2 40 25	2.6653	2 39 55	8
9	2.6936	2 41 38	2.6852	2 41 06	2.6768	2 40 36	2.6683	2 40 06	9
10	2.6966	2 41 48	2.6882	2 41 17	2.6798	2 40 47	2.6713	2 40 17	10
11	2.6996	2 41 59	2.6913	2 41 28	2.6827	2 40 58	2.6743	2 40 27	11
12	2.7027	2 42 09	2.6943	2 41 39	2.6858	2 41 09	2.6774	2 40 38	12
13	2.7058	2 42 20	2.6974	2 41 50	2.6888	2 41 20	2.6804	2 40 49	13
14	2.7088	2 42 31	2.7004	2 42 01	2.6919	2 41 31	2.6835	2 41 01	14
15	2.7119	2 42 42	2.7034	2 42 12	2.6949	2 41 42	2.6865	2 41 11	15
16	2.7149	2 42 53	2.7065	2 42 23	2.6979	2 41 52	2.6895	2 41 22	16
17	2.7181	2 43 04	2.7096	2 42 34	2.7010	2 42 04	2.6925	2 41 33	17
18	2.7211	2 43 15	2.7126	2 42 45	2.7041	2 42 15	2.6956	2 41 44	18
19	2.7242	2 43 26	2.7156	2 42 55	2.7071	2 42 26	2.6986	2 41 55	19
20	2.7272	2 43 37	2.7187	2 43 07	2.7102	2 42 37	2.7017	2 42 06	20
21	2.7304	2 43 48	2.7219	2 43 18	2.7133	2 42 48	2.7047	2 42 17	21
22	2.7335	2 43 59	2.7249	2 43 29	2.7164	2 42 59	2.7078	2 42 28	22
23	2.7365	2 44 11	2.7281	2 43 41	2.7195	2 43 10	2.7109	2 42 39	23
24	2.7397	2 44 22	2.7312	2 43 52	2.7226	2 43 21	2.7140	2 42 50	24
25	2.7428	2 44 33	2.7343	2 44 03	2.7257	2 43 33	2.7171	2 43 02	25
26	2.7459	2 44 44	2.7374	2 44 15	2.7288	2 43 44	2.7202	2 43 13	26
27	2.7491	2 44 55	2.7405	2 44 26	2.7319	2 43 55	2.7233	2 43 24	27
28	2.7522	2 45 07	2.7437	2 44 37	2.7350	2 44 06	2.7264	2 43 35	28
29	2.7554	2 45 19	2.7469	2 44 48	2.7382	2 44 18	2.7296	2 43 47	29
30	2.7586	2 45 30	2.7499	2 44 59	2.7414	2 44 29	2.7328	2 43 58	30
31	2.7618	2 45 41	2.7531	2 45 11	2.7445	2 44 40	2.7359	2 44 09	31
32	2.7650	2 45 52	2.7563	2 45 22	2.7476	2 44 51	2.7390	2 44 20	32
33	2.7681	2 46 03	2.7595	2 45 34	2.7508	2 45 03	2.7421	2 44 32	33
34	2.7713	2 46 15	2.7627	2 45 45	2.7540	2 45 15	2.7453	2 44 43	34
35	2.7745	2 46 26	2.7659	2 45 57	2.7571	2 45 26	2.7485	2 44 55	35
36	2.7778	2 46 38	2.7691	2 46 08	2.7603	2 45 37	2.7517	2 45 06	36
37	2.7811	2 46 50	2.7723	2 46 20	2.7635	2 45 49	2.7549	2 45 18	37
38	2.7842	2 47 03	2.7755	2 46 31	2.7667	2 46 00	2.7581	2 45 29	38
39	2.7875	2 47 15	2.7788	2 46 43	2.7699	2 46 12	2.7613	2 45 41	39
40	2.7907	2 47 26	2.7820	2 46 55	2.7732	2 46 24	2.7645	2 45 52	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$9^h\ 22^m\ 00^s$		$9^h\ 22^m\ 30^s$		$9^h\ 23^m\ 00^s$		$9^h\ 23^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	2.6363	2 38 11	2.6279	2 37 40	2.6195	2 37 10	2.6112	2 36 40	1
2	2.6392	2 38 21	2.6308	2 37 51	2.6224	2 37 20	2.6141	2 36 51	2
3	2.6422	2 38 32	2.6338	2 38 02	2.6254	2 37 31	2.6171	2 37 02	3
4	2.6451	2 38 42	2.6367	2 38 12	2.6284	2 37 42	2.6200	2 37 12	4
5	2.6480	2 38 53	2.6397	2 38 22	2.6313	2 37 53	2.6229	2 37 23	5
6	2.6509	2 39 03	2.6426	2 38 33	2.6342	2 38 03	2.6258	2 37 33	6
7	2.6539	2 39 14	2.6456	2 38 44	2.6371	2 38 14	2.6288	2 37 44	7
8	2.6569	2 39 25	2.6486	2 38 55	2.6401	2 38 25	2.6318	2 37 54	8
9	2.6599	2 39 35	2.6515	2 39 05	2.6431	2 38 35	2.6347	2 38 05	9
10	2.6629	2 39 46	2.6545	2 39 16	2.6460	2 38 46	2.6376	2 38 15	10
11	2.6659	2 39 57	2.6575	2 39 27	2.6490	2 38 56	2.6406	2 38 26	11
12	2.6689	2 40 08	2.6605	2 39 38	2.6520	2 39 07	2.6435	2 38 37	12
13	2.6719	2 40 19	2.6635	2 39 48	2.6550	2 39 18	2.6465	2 38 48	13
14	2.6749	2 40 29	2.6665	2 39 59	2.6580	2 39 29	2.6495	2 38 59	14
15	2.6779	2 40 40	2.6695	2 40 10	2.6610	2 39 40	2.6525	2 39 09	15
16	2.6809	2 40 51	2.6725	2 40 21	2.6640	2 39 50	2.6555	2 39 19	16
17	2.6840	2 41 02	2.6756	2 40 32	2.6670	2 40 01	2.6585	2 39 30	17
18	2.6871	2 41 13	2.6786	2 40 43	2.6700	2 40 12	2.6615	2 39 41	18
19	2.6901	2 41 24	2.6816	2 40 54	2.6730	2 40 23	2.6645	2 39 52	19
20	2.6932	2 41 35	2.6847	2 41 05	2.6761	2 40 34	2.6676	2 40 03	20
21	2.6962	2 41 46	2.6877	2 41 16	2.6791	2 40 45	2.6706	2 40 14	21
22	2.6993	2 41 57	2.6908	2 41 27	2.6822	2 40 56	2.6737	2 40 25	22
23	2.7024	2 42 09	2.6938	2 41 38	2.6852	2 41 07	2.6768	2 40 36	23
24	2.7055	2 42 20	2.6969	2 41 49	2.6883	2 41 18	2.6798	2 40 47	24
25	2.7086	2 42 31	2.7000	2 42 00	2.6914	2 41 29	2.6829	2 40 58	25
26	2.7117	2 42 42	2.7031	2 42 11	2.6945	2 41 40	2.6860	2 41 09	26
27	2.7148	2 42 52	2.7061	2 42 22	2.6976	2 41 51	2.6891	2 41 20	27
28	2.7180	2 43 04	2.7092	2 42 33	2.7007	2 42 02	2.6921	2 41 31	28
29	2.7211	2 43 15	2.7124	2 42 44	2.7037	2 42 13	2.6952	2 41 42	29
30	2.7241	2 43 27	2.7155	2 42 56	2.7069	2 42 25	2.6983	2 41 54	30
31	2.7273	2 43 38	2.7186	2 43 07	2.7100	2 42 36	2.7014	2 42 05	31
32	2.7305	2 43 50	2.7218	2 43 18	2.7131	2 42 47	2.7045	2 42 16	32
33	2.7337	2 44 01	2.7249	2 43 30	2.7163	2 42 59	2.7076	2 42 28	33
34	2.7369	2 44 13	2.7280	2 43 41	2.7194	2 43 10	2.7108	2 42 39	34
35	2.7400	2 44 24	2.7311	2 43 52	2.7225	2 43 21	2.7139	2 42 50	35
36	2.7431	2 44 35	2.7343	2 44 04	2.7257	2 43 32	2.7170	2 43 01	36
37	2.7462	2 44 46	2.7375	2 44 16	2.7288	2 43 44	2.7202	2 43 13	37
38	2.7494	2 44 58	2.7407	2 44 27	2.7320	2 43 55	2.7233	2 43 24	38
39	2.7526	2 45 09	2.7439	2 44 38	2.7352	2 44 07	2.7264	2 43 36	39
40	2.7558	2 45 21	2.7471	2 44 50	2.7342	2 44 18	2.7296	2 43 47	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$9^h\ 24^m\ 00^s$		$9^h\ 24^m\ 30^s$		$9^h\ 25^m\ 00^s$		$9^h\ 25^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	2.6029	2 36 10	2.5945	2 35 40	2.5862	2 35 10	2.5779	2 34 40	1
2	2.6059	2 36 21	2.5974	2 35 51	2.5890	2 35 20	2.5827	2 34 50	2
3	2.6088	2 36 32	2.6003	2 36 01	2.5920	2 35 31	2.5836	2 35 00	3
4	2.6117	2 36 42	2.6031	2 36 11	2.5949	2 35 41	2.5865	2 35 11	4
5	2.6146	2 36 52	2.6060	2 36 22	2.5978	2 35 52	2.5893	2 35 21	5
6	2.6175	2 37 03	2.6090	2 36 32	2.6007	2 36 02	2.5922	2 35 31	6
7	2.6205	2 37 14	2.6120	2 36 43	2.6035	2 36 13	2.5951	2 35 42	7
8	2.6234	2 37 24	2.6149	2 36 54	2.6065	2 36 23	2.5980	2 35 53	8
9	2.6263	2 37 35	2.6178	2 37 04	2.6094	2 36 34	2.6010	2 36 03	9
10	2.6292	2 37 46	2.6208	2 37 15	2.6124	2 36 44	2.6040	2 36 14	10
11	2.6322	2 37 56	2.6238	2 37 26	2.6153	2 36 55	2.6069	2 36 25	11
12	2.6351	2 38 06	2.6267	2 37 36	2.6183	2 37 06	2.6098	2 36 35	12
13	2.6381	2 38 17	2.6297	2 37 47	2.6212	2 37 16	2.6128	2 36 46	13
14	2.6411	2 38 28	2.6327	2 37 58	2.6241	2 37 27	2.6157	2 36 56	14
15	2.6441	2 38 39	2.6356	2 38 08	2.6271	2 37 38	2.6187	2 37 07	15
16	2.6471	2 38 50	2.6386	2 38 19	2.6301	2 37 48	2.6216	2 37 18	16
17	2.6501	2 39 00	2.6416	2 38 30	2.6331	2 37 59	2.6246	2 37 29	17
18	2.6531	2 39 11	2.6446	2 38 41	2.6361	2 38 10	2.6275	2 37 39	18
19	2.6561	2 39 22	2.6476	2 38 51	2.6391	2 38 21	2.6305	2 37 50	19
20	2.6591	2 39 33	2.6506	2 39 02	2.6420	2 38 31	2.6335	2 38 00	20
21	2.6621	2 39 44	2.6536	2 39 13	2.6451	2 38 42	2.6365	2 38 11	21
22	2.6652	2 39 55	2.6566	2 39 24	2.6481	2 38 53	2.6396	2 38 22	22
23	2.6682	2 40 06	2.6596	2 39 34	2.6511	2 39 04	2.6426	2 38 33	23
24	2.6713	2 40 17	2.6626	2 39 45	2.6542	2 39 15	2.6456	2 38 44	24
25	2.6743	2 40 28	2.6657	2 39 57	2.6572	2 39 26	2.6486	2 38 55	25
26	2.6774	2 40 39	2.6687	2 40 07	2.6602	2 39 37	2.6517	2 39 06	26
27	2.6804	2 40 49	2.6718	2 40 18	2.6632	2 39 48	2.6546	2 39 17	27
28	2.6835	2 41 01	2.6748	2 40 29	2.6663	2 39 59	2.6576	2 39 27	28
29	2.6866	2 41 12	2.6779	2 40 41	2.6693	2 40 09	2.6607	2 39 38	29
30	2.6897	2 41 23	2.6810	2 40 52	2.6724	2 40 21	2.6638	2 39 49	30
31	2.6927	2 41 34	2.6841	2 41 03	2.6755	2 40 32	2.6668	2 40 00	31
32	2.6959	2 41 45	2.6872	2 41 14	2.6786	2 40 43	2.6699	2 40 12	32
33	2.6990	2 41 56	2.6903	2 41 25	2.6816	2 40 54	2.6730	2 40 23	33
34	2.7021	2 42 08	2.6934	2 41 36	2.6848	2 41 05	2.6761	2 40 34	34
35	2.7057	2 42 19	2.6965	2 41 47	2.6878	2 41 16	2.6792	2 40 45	35
36	2.7083	2 42 30	2.6996	2 41 59	2.6910	2 41 28	2.6823	2 40 56	36
37	2.7115	2 42 41	2.7027	2 42 10	2.6941	2 41 39	2.6854	2 41 07	37
38	2.7146	2 42 53	2.7058	2 42 21	2.6972	2 41 50	2.6885	2 41 18	38
39	2.7178	2 43 04	2.7089	2 42 32	2.7003	2 42 01	2.6916	2 41 29	39
40	2.7209	2 43 15	2.7119	2 42 43	2.7035	2 42 12	2.6948	2 41 41	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$9^h\ 26^m\ 00^s$		$9^h\ 26^m\ 30^s$		$9^h\ 27^m\ 00^s$		$9^h\ 27^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	2. 5696	2 34 10	2. 5612	2 33 40	2. 5528	2 33 10	2. 5444	2 32 40	1
2	2. 5723	2 34 20	2. 5641	2 33 50	2. 5556	2 33 20	2. 5473	2 32 50	2
3	2. 5753	2 34 31	2. 5670	2 34 01	2. 5585	2 33 31	2. 5501	2 33 00	3
4	2. 5782	2 34 41	2. 5698	2 34 11	2. 5613	2 33 41	2. 5530	2 33 11	4
5	2. 5810	2 34 51	2. 5727	2 34 21	2. 5642	2 33 51	2. 5558	2 33 21	5
6	2. 5839	2 35 02	2. 5755	2 34 31	2. 5671	2 34 02	2. 5587	2 33 31	6
7	2. 5868	2 35 12	2. 5784	2 34 42	2. 5700	2 34 12	2. 5616	2 33 41	7
8	2. 5897	2 35 22	2. 5814	2 34 53	2. 5729	2 34 22	2. 5645	2 33 52	8
9	2. 5926	2 35 33	2. 5842	2 35 03	2. 5758	2 34 33	2. 5674	2 34 03	9
10	2. 5955	2 35 43	2. 5871	2 35 13	2. 5787	2 34 43	2. 5702	2 34 13	10
11	2. 5984	2 35 54	2. 5900	2 35 24	2. 5816	2 34 54	2. 5731	2 34 23	11
12	2. 6013	2 36 04	2. 5929	2 35 34	2. 5845	2 35 04	2. 5761	2 34 34	12
13	2. 6043	2 36 15	2. 5958	2 35 44	2. 5874	2 35 15	2. 5789	2 34 44	13
14	2. 6073	2 36 26	2. 5987	2 35 55	2. 5903	2 35 25	2. 5819	2 34 55	14
15	2. 6103	2 36 37	2. 6017	2 36 06	2. 5932	2 35 36	2. 5847	2 35 05	15
16	2. 6131	2 36 47	2. 6046	2 36 16	2. 5961	2 35 46	2. 5877	2 35 16	16
17	2. 6161	2 36 57	2. 6076	2 36 27	2. 5990	2 35 56	2. 5906	2 35 26	17
18	2. 6190	2 37 08	2. 6106	2 36 38	2. 6020	2 36 07	2. 5935	2 35 36	18
19	2. 6220	2 37 19	2. 6136	2 36 49	2. 6050	2 36 18	2. 5964	2 35 47	19
20	2. 6250	2 37 30	2. 6165	2 36 59	2. 6080	2 36 29	2. 5994	2 35 58	20
21	2. 6280	2 37 40	2. 6194	2 37 09	2. 6109	2 36 39	2. 6024	2 36 09	21
22	2. 6310	2 37 51	2. 6224	2 37 20	2. 6139	2 36 50	2. 6054	2 36 20	22
23	2. 6340	2 38 02	2. 6254	2 37 31	2. 6169	2 37 01	2. 6083	2 36 30	23
24	2. 6370	2 38 13	2. 6285	2 37 42	2. 6199	2 37 12	2. 6113	2 36 41	24
25	2. 6400	2 38 24	2. 6315	2 37 53	2. 6229	2 37 22	2. 6143	2 36 51	25
26	2. 6430	2 38 35	2. 6345	2 38 04	2. 6259	2 37 33	2. 6173	2 37 02	26
27	2. 6461	2 38 46	2. 6376	2 38 15	2. 6289	2 37 44	2. 6203	2 37 13	27
28	2. 6491	2 38 57	2. 6406	2 38 25	2. 6319	2 37 55	2. 6233	2 37 24	28
29	2. 6521	2 39 07	2. 6436	2 38 36	2. 6349	2 38 06	2. 6263	2 37 35	29
30	2. 6552	2 39 18	2. 6466	2 38 47	2. 6379	2 38 16	2. 6293	2 37 45	30
31	2. 6582	2 39 29	2. 6497	2 38 59	2. 6409	2 38 27	2. 6324	2 37 57	31
32	2. 6612	2 39 40	2. 6527	2 39 10	2. 6440	2 38 38	2. 6354	2 38 07	32
33	2. 6643	2 39 51	2. 6557	2 39 21	2. 6471	2 38 50	2. 6383	2 38 18	33
34	2. 6674	2 40 02	2. 6587	2 39 32	2. 6501	2 39 00	2. 6414	2 38 29	34
35	2. 6705	2 40 13	2. 6618	2 39 43	2. 6532	2 39 12	2. 6445	2 38 40	35
36	2. 6735	2 40 24	2. 6650	2 39 54	2. 6563	2 39 23	2. 6476	2 38 51	36
37	2. 6768	2 40 36	2. 6681	2 40 05	2. 6593	2 39 33	2. 6506	2 39 02	37
38	2. 6798	2 40 47	2. 6712	2 40 16	2. 6624	2 39 45	2. 6536	2 39 13	38
39	2. 6829	2 40 58	2. 6743	2 40 27	2. 6655	2 39 56	2. 6567	2 39 24	39
40	2. 6860	2 41 09	2. 6773	2 40 38	2. 6686	2 40 07	2. 6597	2 39 35	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$9^h\ 28^m\ 00^s$		$9^h\ 28^m\ 30^s$		$9^h\ 29^m\ 00^s$		$9^h\ 29^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	2. 5361	2 32 10	2. 5278	2 31 40	2. 5195	2 31 10	2. 5111	2 30 40	1
2	2. 5389	2 32 20	2. 5306	2 31 51	2. 5223	2 31 20	2. 5139	2 30 50	2
3	2. 5418	2 32 30	2. 5335	2 32 01	2. 5251	2 31 30	2. 5167	2 31 00	3
4	2. 5446	2 32 41	2. 5363	2 32 11	2. 5279	2 31 40	2. 5195	2 31 10	4
5	2. 5476	2 32 51	2. 5391	2 32 21	2. 5307	2 31 51	2. 5224	2 31 21	5
6	2. 5503	2 33 01	2. 5419	2 32 31	2. 5335	2 32 01	2. 5252	2 31 31	6
7	2. 5532	2 33 12	2. 5448	2 32 41	2. 5364	2 32 11	2. 5280	2 31 41	7
8	2. 5561	2 33 22	2. 5477	2 32 52	2. 5392	2 32 21	2. 5308	2 31 51	8
9	2. 5589	2 33 32	2. 5506	2 33 02	2. 5420	2 32 31	2. 5336	2 32 01	9
10	2. 5618	2 33 42	2. 5534	2 33 12	2. 5449	2 32 41	2. 5365	2 32 12	10
11	2. 5647	2 33 53	2. 5563	2 33 23	2. 5478	2 32 52	2. 5394	2 32 22	11
12	2. 5675	2 34 03	2. 5591	2 33 33	2. 5507	2 33 03	2. 5423	2 32 32	12
13	2. 5703	2 34 13	2. 5620	2 33 43	2. 5536	2 33 13	2. 5452	2 32 43	13
14	2. 5733	2 34 24	2. 5648	2 33 53	2. 5565	2 33 23	2. 5480	2 32 53	14
15	2. 5763	2 34 35	2. 5678	2 34 04	2. 5594	2 33 34	2. 5509	2 33 03	15
16	2. 5792	2 34 45	2. 5707	2 34 14	2. 5623	2 33 44	2. 5537	2 33 13	16
17	2. 5821	2 34 56	2. 5736	2 34 25	2. 5651	2 33 54	2. 5566	2 33 24	17
18	2. 5851	2 35 06	2. 5765	2 34 35	2. 5680	2 34 05	2. 5594	2 33 34	18
19	2. 5879	2 35 16	2. 5794	2 34 46	2. 5709	2 34 15	2. 5623	2 33 44	19
20	2. 5909	2 35 27	2. 5824	2 34 56	2. 5739	2 34 26	2. 5652	2 33 55	20
21	2. 5939	2 35 38	2. 5853	2 35 07	2. 5768	2 34 36	2. 5682	2 34 06	21
22	2. 5969	2 35 49	2. 5883	2 35 18	2. 5798	2 34 47	2. 5711	2 34 16	22
23	2. 5997	2 35 59	2. 5912	2 35 28	2. 5827	2 34 57	2. 5740	2 34 26	23
24	2. 6027	2 36 10	2. 5941	2 35 39	2. 5856	2 35 08	2. 5769	2 34 37	24
25	2. 6057	2 36 21	2. 5972	2 35 50	2. 5886	2 35 19	2. 5800	2 34 48	25
26	2. 6087	2 36 31	2. 6002	2 36 00	2. 5915	2 35 29	2. 5830	2 34 59	26
27	2. 6117	2 36 42	2. 6031	2 36 11	2. 5945	2 35 40	2. 5859	2 35 09	27
28	2. 6146	2 36 52	2. 6061	2 36 22	2. 5975	2 35 51	2. 5889	2 35 20	28
29	2. 6177	2 37 04	2. 6091	2 36 32	2. 6005	2 36 02	2. 5919	2 35 31	29
30	2. 6207	2 37 14	2. 6121	2 36 43	2. 6034	2 36 12	2. 5948	2 35 41	30
31	2. 6237	2 37 25	2. 6151	2 36 54	2. 6064	2 36 23	2. 5978	2 35 52	31
32	2. 6267	2 37 36	2. 6181	2 37 05	2. 6094	2 36 34	2. 6008	2 36 03	32
33	2. 6298	2 37 47	2. 6211	2 37 16	2. 6125	2 36 45	2. 6038	2 36 14	33
34	2. 6328	2 37 58	2. 6241	2 37 27	2. 6155	2 36 56	2. 6068	2 36 25	34
35	2. 6358	2 38 09	2. 6271	2 37 37	2. 6185	2 37 06	2. 6098	2 36 35	35
36	2. 6388	2 38 20	2. 6302	2 37 49	2. 6215	2 37 17	2. 6128	2 36 46	36
37	2. 6418	2 38 30	2. 6333	2 37 59	2. 6245	2 37 28	2. 6158	2 36 57	37
38	2. 6449	2 38 42	2. 6363	2 38 11	2. 6275	2 37 39	2. 6188	2 37 08	38
39	2. 6480	2 38 53	2. 6394	2 38 22	2. 6306	2 37 50	2. 6219	2 37 19	39
40	2. 6511	2 39 04	2. 6424	2 38 33	2. 6337	2 38 01	2. 6250	2 37 30	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$9^h\ 30^m\ 00^s$		$9^h\ 30^m\ 30^s$		$9^h\ 31^m\ 00^s$		$9^h\ 31^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	2. 5028	2 30 10	2. 4945	2 29 40	2. 4862	2 29 10	2. 4777	2 28 40	1
2	2. 5055	2 30 20	2. 4973	2 29 50	2. 4889	2 29 20	2. 4805	2 28 50	2
3	2. 5083	2 30 30	2. 5001	2 30 00	2. 4917	2 29 30	2. 4832	2 29 00	3
4	2. 5111	2 30 40	2. 5028	2 30 10	2. 4944	2 29 40	2. 4860	2 29 10	4
5	2. 5140	2 30 50	2. 5056	2 30 20	2. 4971	2 29 50	2. 4888	2 29 20	5
6	2. 5168	2 31 00	2. 5084	2 30 30	2. 4999	2 30 00	2. 4916	2 29 30	6
7	2. 5196	2 31 11	2. 5112	2 30 40	2. 5027	2 30 10	2. 4944	2 29 40	7
8	2. 5224	2 31 21	2. 5140	2 30 50	2. 5055	2 30 20	2. 4972	2 29 50	8
9	2. 5252	2 31 31	2. 5168	2 31 00	2. 5084	2 30 30	2. 5000	2 30 00	9
10	2. 5281	2 31 41	2. 5196	2 31 11	2. 5112	2 30 40	2. 5028	2 30 10	10
11	2. 5309	2 31 51	2. 5224	2 31 21	2. 5141	2 30 50	2. 5056	2 30 20	11
12	2. 5338	2 32 02	2. 5252	2 31 31	2. 5169	2 31 00	2. 5084	2 30 30	12
13	2. 5366	2 32 12	2. 5281	2 31 41	2. 5197	2 31 11	2. 5112	2 30 40	13
14	2. 5395	2 32 22	2. 5310	2 31 52	2. 5225	2 31 21	2. 5140	2 30 50	14
15	2. 5424	2 32 32	2. 5339	2 32 02	2. 5253	2 31 31	2. 5169	2 31 00	15
16	2. 5452	2 32 43	2. 5367	2 32 12	2. 5282	2 31 41	2. 5197	2 31 10	16
17	2. 5481	2 32 53	2. 5396	2 32 23	2. 5311	2 31 52	2. 5226	2 31 21	17
18	2. 5510	2 33 03	2. 5425	2 32 33	2. 5340	2 32 02	2. 5254	2 31 31	18
19	2. 5539	2 33 14	2. 5454	2 32 43	2. 5369	2 32 12	2. 5283	2 31 41	19
20	2. 5568	2 33 25	2. 5483	2 32 54	2. 5398	2 32 22	2. 5312	2 31 52	20
21	2. 5597	2 33 35	2. 5512	2 33 04	2. 5427	2 32 33	2. 5341	2 32 02	21
22	2. 5626	2 33 45	2. 5541	2 33 15	2. 5456	2 32 44	2. 5370	2 32 12	22
23	2. 5655	2 33 56	2. 5570	2 33 25	2. 5485	2 32 55	2. 5399	2 32 22	23
24	2. 5685	2 34 07	2. 5599	2 33 36	2. 5514	2 33 05	2. 5428	2 32 33	24
25	2. 5714	2 34 17	2. 5629	2 33 46	2. 5543	2 33 15	2. 5457	2 32 44	25
26	2. 5744	2 34 28	2. 5658	2 33 57	2. 5572	2 33 25	2. 5486	2 32 55	26
27	2. 5773	2 34 38	2. 5687	2 34 07	2. 5602	2 33 36	2. 5515	2 33 05	27
28	2. 5803	2 34 49	2. 5716	2 34 18	2. 5631	2 33 46	2. 5544	2 33 16	28
29	2. 5833	2 35 00	2. 5746	2 34 29	2. 5660	2 33 57	2. 5573	2 33 26	29
30	2. 5862	2 35 10	2. 5776	2 34 40	2. 5690	2 34 08	2. 5603	2 33 37	30
31	2. 5892	2 35 21	2. 5805	2 34 50	2. 5719	2 34 19	2. 5632	2 33 48	31
32	2. 5922	2 35 32	2. 5835	2 35 01	2. 5749	2 34 29	2. 5661	2 33 58	32
33	2. 5952	2 35 43	2. 5865	2 35 11	2. 5779	2 34 40	2. 5691	2 34 09	33
34	2. 5982	2 35 54	2. 5895	2 35 22	2. 5808	2 34 50	2. 5721	2 34 20	34
35	2. 6012	2 36 04	2. 5925	2 35 33	2. 5837	2 35 01	2. 5751	2 34 30	35
36	2. 6043	2 36 15	2. 5955	2 35 44	2. 5867	2 35 12	2. 5781	2 34 41	36
37	2. 6073	2 36 26	2. 5985	2 35 55	2. 5897	2 35 23	2. 5811	2 34 52	37
38	2. 6103	2 36 37	2. 6015	2 36 05	2. 5927	2 35 34	2. 5841	2 35 03	38
39	2. 6133	2 36 48	2. 6045	2 36 16	2. 5958	2 35 45	2. 5871	2 35 14	39
40	2. 6163	2 36 59	2. 6075	2 36 27	2. 5988	2 35 56	2. 5901	2 35 24	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$9^h\ 32^m\ 00^s$		$9^h\ 32^m\ 30^s$		$9^h\ 33^m\ 00^s$		$9^h\ 33^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	2.4694	2 28 10	2.4583	2 27 40	2.4527	2 27 10	2.4444	2 26 40	1
2	2.4721	2 28 20	2.4637	2 27 49	2.4554	2 27 20	2.4471	2 26 50	2
3	2.4748	2 28 30	2.4665	2 27 59	2.4582	2 27 30	2.4498	2 27 00	3
4	2.4776	2 28 40	2.4693	2 28 09	2.4609	2 27 40	2.4525	2 27 09	4
5	2.4804	2 28 50	2.4721	2 28 20	2.4638	2 27 50	2.4553	2 27 19	5
6	2.4832	2 29 00	2.4748	2 28 30	2.4665	2 27 59	2.4580	2 27 29	6
7	2.4860	2 29 10	2.4776	2 28 40	2.4692	2 28 09	2.4608	2 27 39	7
8	2.4888	2 29 20	2.4804	2 28 50	2.4720	2 28 19	2.4636	2 27 49	8
9	2.4916	2 29 30	2.4832	2 29 00	2.4748	2 28 29	2.4664	2 27 59	9
10	2.4944	2 29 40	2.4860	2 29 10	2.4776	2 28 39	2.4691	2 28 09	10
11	2.4972	2 29 50	2.4888	2 29 20	2.4804	2 28 49	2.4719	2 28 19	11
12	2.5000	2 30 00	2.4916	2 29 30	2.4831	2 28 59	2.4747	2 28 29	12
13	2.5028	2 30 10	2.4944	2 29 40	2.4859	2 29 09	2.4775	2 28 39	13
14	2.5056	2 30 20	2.4972	2 29 50	2.4888	2 29 20	2.4803	2 28 49	14
15	2.5084	2 30 30	2.5000	2 30 00	2.4916	2 29 30	2.4831	2 28 59	15
16	2.5112	2 30 40	2.5028	2 30 10	2.4944	2 29 40	2.4859	2 29 09	16
17	2.5140	2 30 50	2.5056	2 30 20	2.4972	2 29 50	2.4887	2 29 19	17
18	2.5169	2 31 01	2.5084	2 30 30	2.5000	2 30 00	2.4915	2 29 29	18
19	2.5198	2 31 11	2.5113	2 30 41	2.5028	2 30 10	2.4943	2 29 39	19
20	2.5227	2 31 22	2.5142	2 30 51	2.5057	2 30 21	2.4972	2 29 50	20
21	2.5255	2 31 32	2.5170	2 31 01	2.5085	2 30 31	2.5000	2 30 00	21
22	2.5284	2 31 42	2.5199	2 31 12	2.5114	2 30 41	2.5029	2 30 10	22
23	2.5313	2 31 53	2.5228	2 31 22	2.5143	2 30 51	2.5058	2 30 21	23
24	2.5342	2 32 03	2.5257	2 31 33	2.5171	2 31 02	2.5086	2 30 31	24
25	2.5371	2 32 14	2.5286	2 31 43	2.5200	2 31 12	2.5114	2 30 41	25
26	2.5400	2 32 24	2.5315	2 31 53	2.5229	2 31 22	2.5143	2 30 51	26
27	2.5429	2 32 34	2.5344	2 32 04	2.5258	2 31 33	2.5172	2 31 02	27
28	2.5458	2 32 45	2.5373	2 32 14	2.5287	2 31 43	2.5201	2 31 12	28
29	2.5487	2 32 55	2.5402	2 32 25	2.5316	2 31 54	2.5230	2 31 22	29
30	2.5517	2 33 06	2.5431	2 32 35	2.5345	2 32 04	2.5259	2 31 33	30
31	2.5546	2 33 17	2.5460	2 32 46	2.5374	2 32 15	2.5288	2 31 44	31
32	2.5575	2 33 27	2.5489	2 32 56	2.5403	2 32 25	2.5317	2 31 54	32
33	2.5605	2 33 38	2.5518	2 33 06	2.5433	2 32 35	2.5346	2 32 05	33
34	2.5635	2 33 49	2.5548	2 33 17	2.5462	2 32 46	2.5375	2 32 15	34
35	2.5665	2 33 59	2.5578	2 33 28	2.5492	2 32 57	2.5405	2 32 26	35
36	2.5694	2 34 10	2.5607	2 33 39	2.5521	2 33 08	2.5434	2 32 37	36
37	2.5724	2 34 21	2.5637	2 33 49	2.5551	2 33 18	2.5463	2 32 47	37
38	2.5754	2 34 31	2.5667	2 34 00	2.5580	2 33 29	2.5493	2 32 57	38
39	2.5784	2 34 42	2.5697	2 34 11	2.5610	2 33 40	2.5523	2 33 08	39
40	2.5814	2 34 53	2.5727	2 34 22	2.5639	2 33 50	2.5552	2 33 19	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$9^h\ 34^m\ 00^s$		$9^h\ 34^m\ 30^s$		$9^h\ 35^m\ 00^s$		$9^h\ 35^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	2.4360	2 26 10	2.4277	2 25 40	2.4194	2 25 10	2.4110	2 24 40	1
2	2.4387	2 26 19	2.4303	2 25 49	2.4220	2 25 19	2.4136	2 24 49	2
3	2.4414	2 26 29	2.4331	2 25 59	2.4247	2 25 29	2.4164	2 24 59	3
4	2.4442	2 26 39	2.4358	2 26 09	2.4274	2 25 38	2.4190	2 25 08	4
5	2.4469	2 26 49	2.4385	2 26 19	2.4301	2 25 48	2.4218	2 25 18	5
6	2.4497	2 26 59	2.4412	2 26 28	2.4328	2 25 58	2.4245	2 25 28	6
7	2.4524	2 27 09	2.4440	2 26 38	2.4356	2 26 08	2.4272	2 25 38	7
8	2.4552	2 27 19	2.4468	2 26 48	2.4383	2 26 18	2.4299	2 25 48	8
9	2.4579	2 27 28	2.4495	2 26 58	2.4410	2 26 28	2.4326	2 25 58	9
10	2.4607	2 27 38	2.4522	2 27 08	2.4438	2 26 38	2.4354	2 26 08	10
11	2.4634	2 27 48	2.4550	2 27 18	2.4466	2 26 48	2.4381	2 26 18	11
12	2.4662	2 27 58	2.4578	2 27 28	2.4494	2 26 58	2.4409	2 26 27	12
13	2.4690	2 28 08	2.4605	2 27 38	2.4521	2 27 08	2.4436	2 26 37	13
14	2.4718	2 28 18	2.4633	2 27 48	2.4548	2 27 18	2.4463	2 26 47	14
15	2.4746	2 28 29	2.4661	2 27 58	2.4576	2 27 27	2.4491	2 26 57	15
16	2.4774	2 28 39	2.4689	2 28 08	2.4604	2 27 37	2.4519	2 27 07	16
17	2.4802	2 28 49	2.4716	2 28 18	2.4632	2 27 47	2.4546	2 27 17	17
18	2.4829	2 28 58	2.4744	2 28 28	2.4660	2 27 57	2.4574	2 27 27	18
19	2.4857	2 29 09	2.4772	2 28 38	2.4688	2 28 07	2.4602	2 27 37	19
20	2.4886	2 29 19	2.4801	2 28 48	2.4716	2 28 18	2.4631	2 27 47	20
21	2.4914	2 29 29	2.4829	2 28 58	2.4744	2 28 28	2.4659	2 27 57	21
22	2.4943	2 29 39	2.4857	2 29 09	2.4773	2 28 38	2.4687	2 28 07	22
23	2.4971	2 29 50	2.4886	2 29 19	2.4801	2 28 48	2.4715	2 28 17	23
24	2.5000	2 30 00	2.4914	2 29 29	2.4829	2 28 58	2.4743	2 28 27	24
25	2.5028	2 30 10	2.4942	2 29 39	2.4857	2 29 08	2.4771	2 28 37	25
26	2.5057	2 30 21	2.4971	2 29 50	2.4886	2 29 19	2.4799	2 28 48	26
27	2.5086	2 30 31	2.5000	2 30 00	2.4914	2 29 29	2.4828	2 28 58	27
28	2.5114	2 30 41	2.5028	2 30 10	2.4942	2 29 39	2.4856	2 29 08	28
29	2.5143	2 30 51	2.5057	2 30 21	2.4971	2 29 49	2.4885	2 29 18	29
30	2.5172	2 31 02	2.5086	2 30 31	2.5000	2 30 00	2.4913	2 29 29	30
31	2.5201	2 31 12	2.5115	2 30 41	2.5028	2 30 10	2.4942	2 29 39	31
32	2.5230	2 31 23	2.5144	2 30 52	2.5057	2 30 20	2.4971	2 29 49	32
33	2.5260	2 31 34	2.5173	2 31 02	2.5086	2 30 31	2.5000	2 30 00	33
34	2.5289	2 31 44	2.5202	2 31 13	2.5116	2 30 41	2.5028	2 30 10	34
35	2.5318	2 31 54	2.5231	2 31 23	2.5145	2 30 52	2.5058	2 30 21	35
36	2.5347	2 32 05	2.5260	2 31 34	2.5174	2 31 03	2.5087	2 30 32	36
37	2.5377	2 32 16	2.5289	2 31 44	2.5203	2 31 13	2.5116	2 30 42	37
38	2.5406	2 32 26	2.5319	2 31 55	2.5231	2 31 24	2.5145	2 30 52	38
39	2.5435	2 32 37	2.5348	2 32 05	2.5260	2 31 34	2.5174	2 31 03	39
40	2.5465	2 32 47	2.5378	2 32 16	2.5290	2 31 45	2.5203	2 31 13	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$9^h\ 36^m\ 00^s$		$9^h\ 36^m\ 30^s$		$9^h\ 37^m\ 00^s$		$9^h\ 37^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	2.4027	2 24 10	2.3943	2 23 39	2.3861	2 23 10	2.3777	2 22 40	1
2	2.4053	2 24 19	2.3970	2 23 49	2.3887	2 23 19	2.3803	2 22 49	2
3	2.4080	2 24 29	2.3997	2 23 59	2.3913	2 23 29	2.3830	2 22 59	3
4	2.4107	2 24 39	2.4023	2 24 08	2.3940	2 23 38	2.3856	2 23 09	4
5	2.4134	2 24 48	2.4050	2 24 18	2.3966	2 23 48	2.3883	2 23 18	5
6	2.4161	2 24 58	2.4077	2 24 28	2.3993	2 23 58	2.3910	2 23 28	6
7	2.4188	2 25 08	2.4104	2 24 37	2.4020	2 24 08	2.3936	2 23 37	7
8	2.4215	2 25 18	2.4131	2 24 47	2.4047	2 24 17	2.3963	2 23 46	8
9	2.4242	2 25 27	2.4158	2 24 57	2.4074	2 24 27	2.3990	2 23 56	9
10	2.4270	2 25 37	2.4185	2 25 07	2.4101	2 24 37	2.4017	2 24 06	10
11	2.4297	2 25 47	2.4213	2 25 17	2.4129	2 24 46	2.4045	2 24 16	11
12	2.4324	2 25 57	2.4240	2 25 26	2.4156	2 24 56	2.4072	2 24 25	12
13	2.4352	2 26 07	2.4268	2 25 36	2.4183	2 25 06	2.4099	2 24 35	13
14	2.4379	2 26 17	2.4295	2 25 46	2.4210	2 25 16	2.4126	2 24 45	14
15	2.4407	2 26 27	2.4322	2 25 56	2.4237	2 25 26	2.4153	2 24 55	15
16	2.4434	2 26 37	2.4350	2 26 06	2.4265	2 25 35	2.4181	2 25 05	16
17	2.4462	2 26 47	2.4378	2 26 16	2.4293	2 25 45	2.4208	2 25 15	17
18	2.4489	2 26 56	2.4405	2 26 26	2.4320	2 25 55	2.4235	2 25 25	18
19	2.4517	2 27 06	2.4432	2 26 36	2.4347	2 26 05	2.4263	2 25 34	19
20	2.4545	2 27 16	2.4460	2 26 46	2.4375	2 26 15	2.4290	2 25 44	20
21	2.4573	2 27 26	2.4488	2 26 56	2.4403	2 26 25	2.4318	2 25 54	21
22	2.4601	2 27 36	2.4516	2 27 06	2.4431	2 26 35	2.4346	2 26 04	22
23	2.4629	2 27 46	2.4544	2 27 16	2.4458	2 26 45	2.4373	2 26 14	23
24	2.4658	2 27 57	2.4572	2 27 26	2.4486	2 26 55	2.4401	2 26 24	24
25	2.4686	2 28 07	2.4600	2 27 36	2.4514	2 27 05	2.4429	2 26 34	25
26	2.4714	2 28 17	2.4628	2 27 46	2.4543	2 27 15	2.4457	2 26 44	26
27	2.4742	2 28 27	2.4657	2 27 56	2.4571	2 27 25	2.4485	2 26 55	27
28	2.4770	2 28 37	2.4685	2 28 06	2.4599	2 27 35	2.4513	2 27 05	28
29	2.4799	2 28 47	2.4713	2 28 16	2.4627	2 27 45	2.4541	2 27 15	29
30	2.4828	2 28 58	2.4741	2 28 27	2.4655	2 27 56	2.4569	2 27 25	30
31	2.4856	2 29 08	2.4770	2 28 37	2.4684	2 28 06	2.4597	2 27 35	31
32	2.4885	2 29 18	2.4799	2 28 47	2.4712	2 28 16	2.4626	2 27 45	32
33	2.4913	2 29 29	2.4827	2 28 58	2.4741	2 28 26	2.4654	2 27 56	33
34	2.4942	2 29 39	2.4855	2 29 08	2.4769	2 28 37	2.4683	2 28 06	34
35	2.4971	2 29 49	2.4884	2 29 19	2.4798	2 28 47	2.4711	2 28 16	35
36	2.5000	2 30 00	2.4913	2 29 29	2.4827	2 28 58	2.4740	2 28 26	36
37	2.5029	2 30 10	2.4942	2 29 39	2.4856	2 29 08	2.4768	2 28 36	37
38	2.5058	2 30 21	2.4971	2 29 49	2.4885	2 29 18	2.4797	2 28 46	38
39	2.5087	2 30 31	2.5000	2 30 00	2.4913	2 29 29	2.4826	2 28 57	39
40	2.5116	2 30 42	2.5029	2 30 10	2.4942	2 29 39	2.4855	2 29 08	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$9^h\ 38^m\ 00^s$		$9^h\ 38^m\ 30^s$		$9^h\ 39^m\ 00^s$		$9^h\ 39^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	2.3693	2 22 09	2.3610	2 21 40	2.3527	2 21 10	2.3443	2 20 39	1
2	2.3719	2 22 19	2.3636	2 21 49	2.3553	2 21 19	2.3469	2 20 49	2
3	2.3746	2 22 29	2.3663	2 21 58	2.3579	2 21 28	2.3496	2 20 59	3
4	2.3773	2 22 38	2.3690	2 22 08	2.3605	2 21 38	2.3522	2 21 08	4
5	2.3800	2 22 48	2.3716	2 22 18	2.3632	2 21 48	2.3548	2 21 17	5
6	2.3826	2 22 57	2.3742	2 22 27	2.3658	2 21 57	2.3574	2 21 27	6
7	2.3852	2 23 07	2.3769	2 22 37	2.3684	2 22 06	2.3601	2 21 36	7
8	2.3879	2 23 17	2.3795	2 22 47	2.3711	2 22 16	2.3627	2 21 46	8
9	2.3906	2 23 27	2.3821	2 22 56	2.3738	2 22 26	2.3653	2 21 55	9
10	2.3933	2 23 36	2.3848	2 23 05	2.3764	2 22 35	2.3680	2 22 05	10
11	2.3960	2 23 46	2.3875	2 23 15	2.3791	2 22 45	2.3707	2 22 15	11
12	2.3987	2 23 56	2.3902	2 23 25	2.3818	2 22 54	2.3734	2 22 24	12
13	2.4014	2 24 05	2.3930	2 23 35	2.3845	2 23 04	2.3760	2 22 34	13
14	2.4041	2 24 15	2.3957	2 23 45	2.3872	2 23 14	2.3787	2 22 44	14
15	2.4068	2 24 25	2.3984	2 23 54	2.3899	2 23 24	2.3814	2 22 53	15
16	2.4095	2 24 34	2.4011	2 24 04	2.3926	2 23 33	2.3841	2 23 03	16
17	2.4122	2 24 44	2.4038	2 24 14	2.3953	2 23 43	2.3868	2 23 12	17
18	2.4149	2 24 54	2.4064	2 24 24	2.3980	2 23 53	2.3895	2 23 22	18
19	2.4177	2 25 04	2.4091	2 24 33	2.4007	2 24 02	2.3922	2 23 32	19
20	2.4205	2 25 14	2.4119	2 24 43	2.4034	2 24 12	2.3949	2 23 42	20
21	2.4232	2 25 24	2.4147	2 24 53	2.4061	2 24 22	2.3976	2 23 51	21
22	2.4260	2 25 34	2.4175	2 25 03	2.4089	2 24 32	2.4004	2 24 01	22
23	2.4288	2 25 44	2.4203	2 25 13	2.4116	2 24 42	2.4031	2 24 11	23
24	2.4316	2 25 54	2.4230	2 25 23	2.4144	2 24 52	2.4059	2 24 21	24
25	2.4343	2 26 03	2.4257	2 25 32	2.4171	2 25 02	2.4086	2 24 31	25
26	2.4371	2 26 13	2.4285	2 25 42	2.4199	2 25 12	2.4114	2 24 41	26
27	2.4399	2 26 23	2.4313	2 25 52	2.4227	2 25 22	2.4141	2 24 51	27
28	2.4427	2 26 33	2.4341	2 26 02	2.4254	2 25 31	2.4169	2 25 01	28
29	2.4455	2 26 44	2.4369	2 26 12	2.4282	2 25 42	2.4196	2 25 11	29
30	2.4483	2 26 54	2.4397	2 26 22	2.4310	2 25 52	2.4224	2 25 21	30
31	2.4511	2 27 04	2.4425	2 26 33	2.4338	2 26 02	2.4252	2 25 31	31
32	2.4540	2 27 14	2.4453	2 26 43	2.4366	2 26 12	2.4280	2 25 41	32
33	2.4568	2 27 24	2.4481	2 26 53	2.4394	2 26 22	2.4308	2 25 51	33
34	2.4596	2 27 35	2.4509	2 27 03	2.4423	2 26 32	2.4336	2 26 01	34
35	2.4624	2 27 45	2.4538	2 27 13	2.4451	2 26 42	2.4365	2 26 11	35
36	2.4653	2 27 55	2.4566	2 27 23	2.4479	2 26 52	2.4393	2 26 21	36
37	2.4682	2 28 05	2.4594	2 27 33	2.4508	2 27 03	2.4421	2 26 32	37
38	2.4710	2 28 15	2.4623	2 27 44	2.4536	2 27 13	2.4449	2 26 42	38
39	2.4739	2 28 25	2.4652	2 27 55	2.4565	2 27 23	2.4478	2 26 52	39
40	2.4767	2 28 36	2.4680	2 28 05	2.4593	2 27 33	2.4506	2 27 02	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$9^h\ 40^m\ 00^s$		$9^h\ 40^m\ 30^s$		$9^h\ 41^m\ 00^s$		$9^h\ 41^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	2.3359	2 20 09	2.3277	2 19 39	2.3193	2 19 09	2.3109	2 18 39	1
2	2.3385	2 20 19	2.3303	2 19 49	2.3219	2 19 19	2.3135	2 18 49	2
3	2.3412	2 20 28	2.3329	2 19 58	2.3245	2 19 28	2.3161	2 18 58	3
4	2.3438	2 20 37	2.3355	2 20 07	2.3271	2 19 37	2.3187	2 19 08	4
5	2.3464	2 20 47	2.3382	2 20 17	2.3297	2 19 46	2.3213	2 19 17	5
6	2.3490	2 20 56	2.3408	2 20 26	2.3323	2 19 56	2.3239	2 19 27	6
7	2.3516	2 21 06	2.3434	2 20 36	2.3349	2 20 06	2.3265	2 19 36	7
8	2.3543	2 21 15	2.3460	2 20 45	2.3375	2 20 15	2.3291	2 19 45	8
9	2.3569	2 21 25	2.3486	2 20 55	2.3401	2 20 24	2.3317	2 19 54	9
10	2.3596	2 21 35	2.3511	2 21 04	2.3427	2 20 33	2.3343	2 20 03	10
11	2.3622	2 21 44	2.3537	2 21 14	2.3453	2 20 42	2.3369	2 20 13	11
12	2.3649	2 21 54	2.3564	2 21 23	2.3480	2 20 53	2.3395	2 20 22	12
13	2.3676	2 22 03	2.3591	2 21 33	2.3506	2 21 02	2.3422	2 20 32	13
14	2.3703	2 22 13	2.3618	2 21 42	2.3533	2 21 12	2.3449	2 20 42	14
15	2.3729	2 22 22	2.3645	2 21 52	2.3560	2 21 22	2.3475	2 20 51	15
16	2.3756	2 22 32	2.3672	2 22 02	2.3586	2 21 31	2.3502	2 21 01	16
17	2.3783	2 22 42	2.3699	2 22 12	2.3613	2 21 41	2.3528	2 21 11	17
18	2.3810	2 22 52	2.3725	2 22 21	2.3640	2 21 50	2.3555	2 21 20	18
19	2.3837	2 23 01	2.3751	2 22 30	2.3667	2 22 00	2.3581	2 21 29	19
20	2.3864	2 23 11	2.3778	2 22 40	2.3693	2 22 09	2.3608	2 21 39	20
21	2.3891	2 23 21	2.3806	2 22 50	2.3720	2 22 19	2.3635	2 21 49	21
22	2.3918	2 23 30	2.3834	2 23 00	2.3747	2 22 29	2.3662	2 21 58	22
23	2.3945	2 23 40	2.3861	2 23 10	2.3775	2 22 39	2.3689	2 22 08	23
24	2.3973	2 23 50	2.3888	2 23 19	2.3802	2 22 48	2.3716	2 22 18	24
25	2.4000	2 24 00	2.3915	2 23 29	2.3829	2 22 58	2.3744	2 22 28	25
26	2.4028	2 24 10	2.3942	2 23 39	2.3856	2 23 08	2.3771	2 22 38	26
27	2.4055	2 24 20	2.3970	2 23 49	2.3883	2 23 18	2.3798	2 22 47	27
28	2.4083	2 24 30	2.3997	2 23 59	2.3901	2 23 28	2.3825	2 22 57	28
29	2.4110	2 24 40	2.4024	2 24 09	2.3938	2 23 38	2.3852	2 23 07	29
30	2.4138	2 24 50	2.4052	2 24 19	2.3966	2 23 48	2.3880	2 23 17	30
31	2.4166	2 25 00	2.4080	2 24 29	2.3994	2 23 58	2.3907	2 23 27	31
32	2.4194	2 25 10	2.4108	2 24 39	2.4021	2 24 07	2.3935	2 23 37	32
33	2.4222	2 25 20	2.4135	2 24 49	2.4048	2 24 17	2.3963	2 23 47	33
34	2.4250	2 25 30	2.4163	2 24 59	2.4076	2 24 27	2.3990	2 23 56	34
35	2.4278	2 25 40	2.4191	2 25 09	2.4104	2 24 37	2.4018	2 24 06	35
36	2.4306	2 25 50	2.4219	2 25 19	2.4132	2 24 48	2.4046	2 24 16	36
37	2.4334	2 26 00	2.4247	2 25 29	2.4160	2 24 58	2.4073	2 24 26	37
38	2.4362	2 26 10	2.4275	2 25 39	2.4188	2 25 08	2.4100	2 24 36	38
39	2.4391	2 26 21	2.4303	2 25 49	2.4216	2 25 18	2.4128	2 24 46	39
40	2.4419	2 26 31	2.4331	2 26 00	2.4244	2 25 28	2.4156	2 24 56	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$9^h\ 42^m\ 00^s$		$9^h\ 42^m\ 30^s$		$9^h\ 43^m\ 00^s$		$9^h\ 43^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	2.3026	2 18 09	2.2943	2 17 39	2.2859	2 17 09	2.2776	2 16 39	1
2	2.3051	2 18 18	2.2968	2 17 48	2.2884	2 17 18	2.2801	2 16 48	2
3	2.3077	2 18 28	2.2993	2 17 57	2.2909	2 17 27	2.2826	2 16 57	3
4	2.3103	2 18 37	2.3019	2 18 07	2.2934	2 17 36	2.2852	2 17 08	4
5	2.3129	2 18 46	2.3045	2 18 16	2.2960	2 17 46	2.2877	2 17 16	5
6	2.3154	2 18 55	2.3071	2 18 26	2.2986	2 17 55	2.2902	2 17 25	6
7	2.3180	2 19 05	2.3097	2 18 35	2.3012	2 18 04	2.2928	2 17 34	7
8	2.3206	2 19 14	2.3123	2 18 44	2.3038	2 18 14	2.2954	2 17 43	8
9	2.3232	2 19 24	2.3148	2 18 53	2.3064	2 18 23	2.2980	2 17 53	9
10	2.3258	2 19 33	2.3174	2 19 03	2.3090	2 18 32	2.3006	2 18 02	10
11	2.3284	2 19 42	2.3200	2 19 12	2.3116	2 18 42	2.3032	2 18 12	11
12	2.3310	2 19 52	2.3226	2 19 21	2.3142	2 18 51	2.3058	2 18 21	12
13	2.3337	2 20 01	2.3253	2 19 31	2.3168	2 19 00	2.3084	2 18 30	13
14	2.3364	2 20 11	2.3279	2 19 40	2.3194	2 19 10	2.3110	2 18 40	14
15	2.3390	2 20 20	2.3306	2 19 50	2.3220	2 19 19	2.3136	2 18 50	15
16	2.3417	2 20 30	2.3333	2 20 00	2.3246	2 19 29	2.3162	2 18 59	16
17	2.3443	2 20 39	2.3359	2 20 09	2.3273	2 19 38	2.3188	2 19 08	17
18	2.3470	2 20 49	2.3385	2 20 19	2.3300	2 19 48	2.3215	2 19 17	18
19	2.3497	2 20 59	2.3411	2 20 28	2.3326	2 19 57	2.3241	2 19 27	19
20	2.3523	2 21 08	2.3437	2 20 37	2.3352	2 20 07	2.3267	2 19 36	20
21	2.3550	2 21 18	2.3464	2 20 47	2.3379	2 20 16	2.3294	2 19 45	21
22	2.3577	2 21 28	2.3491	2 20 57	2.3406	2 20 26	2.3320	2 19 55	22
23	2.3604	2 21 37	2.3518	2 21 06	2.3432	2 20 36	2.3347	2 20 05	23
24	2.3631	2 21 47	2.3545	2 21 16	2.3459	2 20 45	2.3374	2 20 15	24
25	2.3657	2 21 57	2.3572	2 21 26	2.3486	2 20 55	2.3400	2 20 24	25
26	2.3684	2 22 06	2.3599	2 21 36	2.3513	2 21 05	2.3427	2 20 34	26
27	2.3711	2 22 16	2.3626	2 21 45	2.3540	2 21 15	2.3454	2 20 43	27
28	2.3738	2 22 26	2.3653	2 21 55	2.3567	2 21 24	2.3480	2 20 53	28
29	2.3766	2 22 36	2.3680	2 22 05	2.3594	2 21 34	2.3507	2 21 03	29
30	2.3793	2 22 45	2.3707	2 22 15	2.3621	2 21 44	2.3534	2 21 12	30
31	2.3820	2 22 55	2.3734	2 22 24	2.3648	2 21 53	2.3562	2 21 22	31
32	2.3848	2 23 05	2.3762	2 22 34	2.3675	2 22 03	2.3589	2 21 32	32
33	2.3876	2 23 15	2.3790	2 22 44	2.3702	2 22 13	2.3616	2 21 42	33
34	2.3903	2 23 25	2.3817	2 22 54	2.3729	2 22 22	2.3643	2 21 51	34
35	2.3930	2 23 35	2.3844	2 23 04	2.3757	2 22 33	2.3671	2 22 02	35
36	2.3958	2 23 45	2.3872	2 23 14	2.3785	2 22 43	2.3699	2 22 12	36
37	2.3986	2 23 55	2.3899	2 23 24	2.3812	2 22 52	2.3726	2 22 21	37
38	2.4014	2 24 05	2.3927	2 23 34	2.3840	2 23 02	2.3753	2 22 31	38
39	2.4042	2 24 15	2.3955	2 23 44	2.3868	2 23 12	2.3781	2 22 41	39
40	2.4070	2 24 25	2.3983	2 23 54	2.3895	2 23 22	2.3808	2 22 51	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	9h 44m 00s		9h 44m 30s		9h 45m 00s		9h 45m 30s		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	2.2692	2 16 09	2.2609	2 15 39	2.2526	2 15 09	2.2442	2 14 39	1
2	2.2717	2 16 18	2.2634	2 15 48	2.2551	2 15 18	2.2467	2 14 48	2
3	2.2742	2 16 27	2.2659	2 15 57	2.2576	2 15 27	2.2492	2 14 57	3
4	2.2767	2 16 36	2.2684	2 16 06	2.2601	2 15 36	2.2517	2 15 06	4
5	2.2793	2 16 45	2.2710	2 16 15	2.2627	2 15 45	2.2542	2 15 15	5
6	2.2819	2 16 55	2.2735	2 16 24	2.2652	2 15 54	2.2567	2 15 24	6
7	2.2844	2 17 04	2.2761	2 16 34	2.2677	2 16 03	2.2593	2 15 33	7
8	2.2870	2 17 13	2.2786	2 16 43	2.2702	2 16 13	2.2618	2 15 42	8
9	2.2895	2 17 22	2.2811	2 16 52	2.2727	2 16 22	2.2643	2 15 51	9
10	2.2921	2 17 32	2.2837	2 17 01	2.2753	2 16 31	2.2669	2 16 01	10
11	2.2947	2 17 41	2.2863	2 17 11	2.2779	2 16 40	2.2694	2 16 10	11
12	2.2973	2 17 51	2.2889	2 17 20	2.2805	2 16 49	2.2720	2 16 19	12
13	2.2999	2 18 00	2.2915	2 17 29	2.2830	2 16 59	2.2746	2 16 28	13
14	2.3025	2 18 09	2.2941	2 17 38	2.2856	2 17 08	2.2771	2 16 37	14
15	2.3051	2 18 18	2.2967	2 17 48	2.2882	2 17 18	2.2796	2 16 47	15
16	2.3077	2 18 27	2.2993	2 17 57	2.2907	2 17 27	2.2822	2 16 56	16
17	2.3103	2 18 37	2.3019	2 18 07	2.2933	2 17 36	2.2848	2 17 05	17
18	2.3129	2 18 46	2.3045	2 18 16	2.2959	2 17 45	2.2874	2 17 15	18
19	2.3155	2 18 55	2.3071	2 18 26	2.2985	2 17 55	2.2900	2 17 24	19
20	2.3182	2 19 05	2.3097	2 18 35	2.3011	2 18 04	2.2926	2 17 33	20
21	2.3209	2 19 15	2.3123	2 18 44	2.3037	2 18 14	2.2952	2 17 42	21
22	2.3235	2 19 24	2.3149	2 18 54	2.3064	2 18 23	2.2979	2 17 52	22
23	2.3261	2 19 34	2.3175	2 19 03	2.3090	2 18 32	2.3005	2 18 01	23
24	2.3288	2 19 44	2.3202	2 19 12	2.3117	2 18 42	2.3032	2 18 11	24
25	2.3314	2 19 53	2.3229	2 19 22	2.3143	2 18 51	2.3059	2 18 21	25
26	2.3341	2 20 03	2.3255	2 19 31	2.3170	2 19 01	2.3085	2 18 31	26
27	2.3368	2 20 12	2.3282	2 19 41	2.3196	2 19 11	2.3111	2 18 40	27
28	2.3394	2 20 22	2.3308	2 19 51	2.3223	2 19 20	2.3137	2 18 49	28
29	2.3421	2 20 32	2.3335	2 20 01	2.3250	2 19 30	2.3163	2 18 59	29
30	2.3448	2 20 42	2.3362	2 20 10	2.3276	2 19 39	2.3189	2 19 08	30
31	2.3475	2 20 51	2.3389	2 20 20	2.3303	2 19 49	2.3216	2 19 18	31
32	2.3502	2 21 01	2.3416	2 20 30	2.3330	2 19 59	2.3243	2 19 27	32
33	2.3529	2 21 10	2.3443	2 20 39	2.3357	2 20 09	2.3270	2 19 37	33
34	2.3556	2 21 20	2.3470	2 20 49	2.3384	2 20 18	2.3297	2 19 47	34
35	2.3584	2 21 30	2.3497	2 20 59	2.3411	2 20 28	2.3324	2 19 57	35
36	2.3611	2 21 40	2.3524	2 21 09	2.3438	2 20 38	2.3352	2 20 07	36
37	2.3639	2 21 50	2.3551	2 21 18	2.3465	2 20 47	2.3379	2 20 16	37
38	2.3666	2 22 00	2.3578	2 21 28	2.3492	2 20 57	2.3405	2 20 25	38
39	2.3693	2 22 10	2.3606	2 21 38	2.3519	2 21 07	2.3432	2 20 35	39
40	2.3721	2 22 20	2.3634	2 21 48	2.3546	2 21 17	2.3458	2 20 45	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$9^h\ 46^m\ 00^s$		$9^h\ 46^m\ 30^s$		$9^h\ 47^m\ 00^s$		$9^h\ 47^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	2. 2358	2 14 09	2. 2275	2 13 39	2. 2191	2 13 09	2. 2108	2 12 39	1
2	2. 2383	2 14 18	2. 2300	2 13 48	2. 2215	2 13 17	2. 2132	2 12 48	2
3	2. 2408	2 14 27	2. 2325	2 13 56	2. 2241	2 13 26	2. 2157	2 12 57	3
4	2. 2433	2 14 36	2. 2350	2 14 05	2. 2266	2 13 35	2. 2182	2 13 06	4
5	2. 2458	2 14 45	2. 2375	2 14 14	2. 2291	2 13 44	2. 2207	2 13 15	5
6	2. 2483	2 14 54	2. 2400	2 14 23	2. 2316	2 13 53	2. 2232	2 13 24	6
7	2. 2509	2 15 03	2. 2425	2 14 32	2. 2341	2 14 03	2. 2257	2 13 33	7
8	2. 2534	2 15 12	2. 2450	2 14 42	2. 2366	2 14 12	2. 2282	2 13 42	8
9	2. 2559	2 15 21	2. 2475	2 14 51	2. 2391	2 14 21	2. 2306	2 13 50	9
10	2. 2584	2 15 30	2. 2500	2 15 00	2. 2416	2 14 30	2. 2331	2 13 59	10
11	2. 2610	2 15 40	2. 2526	2 15 09	2. 2441	2 14 39	2. 2357	2 14 09	11
12	2. 2635	2 15 49	2. 2551	2 15 18	2. 2466	2 14 48	2. 2382	2 14 18	12
13	2. 2660	2 15 58	2. 2576	2 15 27	2. 2491	2 14 57	2. 2407	2 14 27	13
14	2. 2676	2 16 07	2. 2602	2 15 37	2. 2516	2 15 06	2. 2432	2 14 36	14
15	2. 2712	2 16 16	2. 2627	2 15 46	2. 2542	2 15 15	2. 2458	2 14 45	15
16	2. 2738	2 16 26	2. 2653	2 15 55	2. 2567	2 15 24	2. 2483	2 14 54	16
17	2. 2763	2 16 35	2. 2679	2 16 04	2. 2593	2 15 33	2. 2509	2 15 03	17
18	2. 2789	2 16 44	2. 2704	2 16 13	2. 2619	2 15 43	2. 2534	2 15 12	18
19	2. 2815	2 16 53	2. 2730	2 16 22	2. 2644	2 15 52	2. 2559	2 15 21	19
20	2. 2841	2 17 03	2. 2756	2 16 31	2. 2670	2 16 02	2. 2585	2 15 31	20
21	2. 2867	2 17 13	2. 2782	2 16 40	2. 2696	2 16 11	2. 2611	2 15 40	21
22	2. 2893	2 17 23	2. 2808	2 16 50	2. 2722	2 16 20	2. 2637	2 15 49	22
23	2. 2920	2 17 32	2. 2834	2 16 59	2. 2748	2 16 29	2. 2663	2 15 58	23
24	2. 2946	2 17 41	2. 2860	2 17 09	2. 2774	2 16 39	2. 2689	2 16 08	24
25	2. 2972	2 17 50	2. 2886	2 17 19	2. 2800	2 16 48	2. 2715	2 16 17	25
26	2. 2998	2 17 59	2. 2912	2 17 28	2. 2826	2 16 57	2. 2741	2 16 27	26
27	2. 3025	2 18 08	2. 2938	2 17 37	2. 2852	2 17 07	2. 2767	2 16 36	27
28	2. 3051	2 18 17	2. 2965	2 17 47	2. 2878	2 17 16	2. 2793	2 16 45	28
29	2. 3077	2 18 27	2. 2991	2 17 56	2. 2904	2 17 25	2. 2819	2 16 55	29
30	2. 3103	2 18 37	2. 3017	2 18 06	2. 2931	2 17 35	2. 2845	2 17 04	30
31	2. 3130	2 18 47	2. 3044	2 18 15	2. 2957	2 17 45	2. 2872	2 17 14	31
32	2. 3157	2 18 56	2. 3070	2 18 24	2. 2983	2 17 54	2. 2898	2 17 23	32
33	2. 3183	2 19 05	2. 3097	2 18 34	2. 3009	2 18 03	2. 2924	2 17 33	33
34	2. 3210	2 19 15	2. 3124	2 18 44	2. 3036	2 18 13	2. 2950	2 17 42	34
35	2. 3237	2 19 25	2. 3150	2 18 53	2. 3063	2 18 23	2. 2977	2 17 51	35
36	2. 3254	2 19 35	2. 3177	2 19 03	2. 3090	2 18 32	2. 3003	2 18 01	36
37	2. 3291	2 19 45	2. 3204	2 19 13	2. 3117	2 18 42	2. 3030	2 18 11	37
38	2. 3318	2 19 54	2. 3231	2 19 23	2. 3144	2 18 52	2. 3057	2 18 21	38
39	2. 3345	2 20 04	2. 3258	2 19 33	2. 3171	2 19 02	2. 3084	2 18 30	39
40	2. 3372	2 20 14	2. 3285	2 19 43	2. 3198	2 19 11	2. 3110	2 18 40	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	9h 48m 00s		9h 48m 30s		9h 49m 00s		9h 49m 30s		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	2.2025	2 12 09	2.1941	2 11 39	2.1857	2 11 09	2.1775	2 10 39	1
2	2.2049	2 12 18	2.1965	2 11 47	2.1882	2 11 18	2.1799	2 10 47	2
3	2.2074	2 12 27	2.1990	2 11 56	2.1907	2 11 27	2.1823	2 10 56	3
4	2.2098	2 12 35	2.2014	2 12 05	2.1931	2 11 35	2.1847	2 11 05	4
5	2.2123	2 12 44	2.2039	2 12 14	2.1956	2 11 44	2.1872	2 11 14	5
6	2.2148	2 12 53	2.2064	2 12 23	2.1980	2 11 53	2.1896	2 11 23	6
7	2.2173	2 13 02	2.2089	2 12 32	2.2004	2 12 01	2.1920	2 11 31	7
8	2.2197	2 13 11	2.2114	2 12 41	2.2029	2 12 10	2.1945	2 11 40	8
9	2.2222	2 13 20	2.2138	2 12 50	2.2054	2 12 19	2.1970	2 11 49	9
10	2.2247	2 13 29	2.2163	2 12 59	2.2079	2 12 28	2.1994	2 11 58	10
11	2.2272	2 13 38	2.2188	2 13 08	2.2104	2 12 37	2.2019	2 12 07	11
12	2.2297	2 13 47	2.2213	2 13 16	2.2129	2 12 46	2.2044	2 12 16	12
13	2.2322	2 13 56	2.2238	2 13 25	2.2154	2 12 55	2.2069	2 12 25	13
14	2.2348	2 14 05	2.2263	2 13 34	2.2179	2 13 04	2.2094	2 12 34	14
15	2.2373	2 14 14	2.2288	2 13 43	2.2204	2 13 13	2.2119	2 12 43	15
16	2.2399	2 14 24	2.2313	2 13 52	2.2229	2 13 22	2.2144	2 12 52	16
17	2.2424	2 14 33	2.2339	2 14 01	2.2254	2 13 31	2.2169	2 13 01	17
18	2.2449	2 14 42	2.2364	2 14 10	2.2279	2 13 40	2.2194	2 13 10	18
19	2.2474	2 14 51	2.2389	2 14 19	2.2304	2 13 49	2.2219	2 13 19	19
20	2.2500	2 15 00	2.2415	2 14 29	2.2330	2 13 58	2.2244	2 13 28	20
21	2.2526	2 15 09	2.2441	2 14 38	2.2355	2 14 08	2.2270	2 13 37	21
22	2.2552	2 15 18	2.2467	2 14 47	2.2381	2 14 17	2.2295	2 13 46	22
23	2.2578	2 15 28	2.2492	2 14 56	2.2406	2 14 26	2.2320	2 13 55	23
24	2.2604	2 15 37	2.2517	2 15 06	2.2431	2 14 35	2.2346	2 14 05	24
25	2.2629	2 15 46	2.2543	2 15 16	2.2457	2 14 45	2.2372	2 14 14	25
26	2.2655	2 15 55	2.2569	2 15 26	2.2483	2 14 54	2.2397	2 14 23	26
27	2.2681	2 16 05	2.2595	2 15 35	2.2509	2 15 03	2.2423	2 14 32	27
28	2.2707	2 16 15	2.2621	2 15 44	2.2535	2 15 13	2.2449	2 14 42	28
29	2.2732	2 16 24	2.2646	2 15 53	2.2560	2 15 22	2.2474	2 14 51	29
30	2.2758	2 16 33	2.2672	2 16 02	2.2586	2 15 31	2.2500	2 15 00	30
31	2.2785	2 16 42	2.2698	2 16 11	2.2612	2 15 41	2.2526	2 15 09	31
32	2.2811	2 16 52	2.2725	2 16 20	2.2638	2 15 50	2.2552	2 15 19	32
33	2.2838	2 17 01	2.2751	2 16 30	2.2664	2 15 59	2.2578	2 15 28	33
34	2.2864	2 17 11	2.2777	2 16 39	2.2690	2 16 09	2.2604	2 15 37	34
35	2.2890	2 17 20	2.2804	2 16 49	2.2716	2 16 18	2.2630	2 15 47	35
36	2.2917	2 17 30	2.2830	2 16 58	2.2743	2 16 28	2.2656	2 15 56	36
37	2.2944	2 17 40	2.2857	2 17 08	2.2769	2 16 37	2.2683	2 16 06	37
38	2.2970	2 17 49	2.2883	2 17 18	2.2795	2 16 46	2.2709	2 16 15	38
39	2.2997	2 17 59	2.2909	2 17 27	2.2822	2 16 56	2.2735	2 16 25	39
40	2.3023	2 18 09	2.2936	2 17 37	2.2848	2 17 05	2.2762	2 16 34	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$9^h\ 50^m\ 00^s$		$9^h\ 50^m\ 30^s$		$9^h\ 51^m\ 00^s$		$9^h\ 51^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	2. 1691	2 10 09	2. 1607	2 09 39	2. 1524	2 09 09	2. 1441	2 08 39	1
2	2. 1715	2 10 17	2. 1631	2 09 47	2. 1548	2 09 17	2. 1465	2 08 47	2
3	2. 1740	2 10 26	2. 1655	2 09 56	2. 1572	2 09 26	2. 1489	2 08 56	3
4	2. 1764	2 10 35	2. 1679	2 10 04	2. 1596	2 09 34	2. 1513	2 09 05	4
5	2. 1788	2 10 44	2. 1704	2 10 13	2. 1620	2 09 43	2. 1537	2 09 14	5
6	2. 1812	2 10 52	2. 1728	2 10 22	2. 1644	2 09 52	2. 1561	2 09 22	6
7	2. 1836	2 11 01	2. 1752	2 10 31	2. 1669	2 10 01	2. 1585	2 09 31	7
8	2. 1861	2 11 10	2. 1776	2 10 40	2. 1694	2 10 10	2. 1609	2 09 39	8
9	2. 1886	2 11 19	2. 1801	2 10 48	2. 1718	2 10 18	2. 1633	2 09 48	9
10	2. 1910	2 11 28	2. 1826	2 10 57	2. 1742	2 10 27	2. 1657	2 09 57	10
11	2. 1935	2 11 37	2. 1850	2 11 06	2. 1767	2 10 36	2. 1681	2 10 05	11
12	2. 1959	2 11 45	2. 1874	2 11 15	2. 1791	2 10 45	2. 1705	2 10 14	12
13	2. 1984	2 11 54	2. 1899	2 11 24	2. 1815	2 10 53	2. 1729	2 10 22	13
14	2. 2009	2 12 03	2. 1924	2 11 33	2. 1840	2 11 02	2. 1753	2 10 31	14
15	2. 2024	2 12 12	2. 1949	2 11 42	2. 1865	2 11 11	2. 1778	2 10 40	15
16	2. 2058	2 12 21	2. 1974	2 11 51	2. 1890	2 11 20	2. 1803	2 10 49	16
17	2. 2084	2 12 30	2. 1999	2 12 00	2. 1915	2 11 29	2. 1828	2 10 58	17
18	2. 2109	2 12 39	2. 2024	2 12 09	2. 1940	2 11 38	2. 1853	2 11 07	18
19	2. 2134	2 12 48	2. 2049	2 12 18	2. 1964	2 11 47	2. 1878	2 11 16	19
20	2. 2159	2 12 57	2. 2074	2 12 27	2. 1989	2 11 56	2. 1903	2 11 25	20
21	2. 2184	2 13 06	2. 2099	2 12 36	2. 2014	2 12 05	2. 1928	2 11 34	21
22	2. 2209	2 13 15	2. 2124	2 12 45	2. 2039	2 12 14	2. 1953	2 11 43	22
23	2. 2235	2 13 25	2. 2149	2 12 54	2. 2064	2 12 23	2. 1978	2 11 52	23
24	2. 2261	2 13 34	2. 2174	2 13 03	2. 2089	2 12 32	2. 2003	2 12 01	24
25	2. 2285	2 13 43	2. 2200	2 13 12	2. 2115	2 12 41	2. 2028	2 12 10	25
26	2. 2311	2 13 52	2. 2225	2 13 21	2. 2140	2 12 50	2. 2053	2 12 19	26
27	2. 2336	2 14 01	2. 2250	2 13 30	2. 2165	2 12 59	2. 2078	2 12 28	27
28	2. 2362	2 14 10	2. 2276	2 13 39	2. 2190	2 13 08	2. 2103	2 12 37	28
29	2. 2388	2 14 20	2. 2302	2 13 49	2. 2215	2 13 17	2. 2129	2 12 46	29
30	2. 2414	2 14 29	2. 2328	2 13 58	2. 2241	2 13 27	2. 2155	2 12 56	30
31	2. 2440	2 14 38	2. 2353	2 14 07	2. 2267	2 13 36	2. 2180	2 13 05	31
32	2. 2466	2 14 48	2. 2379	2 14 16	2. 2293	2 13 45	2. 2205	2 13 14	32
33	2. 2491	2 14 57	2. 2405	2 14 26	2. 2318	2 13 54	2. 2230	2 13 23	33
34	2. 2517	2 15 06	2. 2431	2 14 35	2. 2344	2 14 04	2. 2255	2 13 32	34
35	2. 2543	2 15 15	2. 2457	2 14 44	2. 2370	2 14 13	2. 2281	2 13 41	35
36	2. 2569	2 15 25	2. 2483	2 14 54	2. 2396	2 14 23	2. 2307	2 13 51	36
37	2. 2595	2 15 34	2. 2509	2 15 03	2. 2422	2 14 32	2. 2333	2 14 00	37
38	2. 2622	2 15 44	2. 2535	2 15 13	2. 2448	2 14 41	2. 2359	2 14 09	38
39	2. 2648	2 15 53	2. 2561	2 15 22	2. 2474	2 14 51	2. 2385	2 14 19	39
40	2. 2674	2 16 02	2. 2587	2 15 31	2. 2500	2 15 00	2. 2411	2 14 28	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$9^h\ 52^m\ 00^s$		$9^h\ 52^m\ 30^s$		$9^h\ 53^m\ 00^s$		$9^h\ 53^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	2. 1357	2 08 09	2. 1273	2 07 38	2. 1190	2 07 08	2. 1106	2 06 38	1
2	2. 1381	2 08 17	2. 1297	2 07 47	2. 1214	2 07 17	2. 1129	2 06 46	2
3	2. 1405	2 08 26	2. 1321	2 07 56	2. 1238	2 07 26	2. 1152	2 06 55	3
4	2. 1429	2 08 34	2. 1345	2 08 04	2. 1261	2 07 34	2. 1176	2 07 03	4
5	2. 1453	2 08 43	2. 1369	2 08 13	2 1285	2 07 43	2. 1200	2 07 12	5
6	2. 1477	2 08 52	2. 1393	2 08 21	2. 1309	2 07 51	2. 1224	2 07 21	6
7	2. 1501	2 09 00	2. 1417	2 08 30	2. 1333	2 08 00	2. 1248	2 07 29	7
8	2. 1525	2 09 09	2. 1441	2 08 39	2. 1357	2 08 09	2. 1272	2 07 38	8
9	2. 1549	2 09 18	2. 1465	2 08 47	2. 1381	2 08 17	2. 1296	2 07 47	9
10	2. 1573	2 09 26	2. 1489	2 08 56	2. 1404	2 08 26	2. 1320	2 07 56	10
11	2. 1597	2 09 35	2. 1513	2 09 05	2. 1428	2 08 34	2. 1344	2 08 04	11
12	2. 1621	2 09 44	2. 1537	2 09 14	2. 1452	2 08 43	2. 1368	2 08 13	12
13	2. 1646	2 09 53	2. 1561	2 09 22	2. 1476	2 08 51	2. 1392	2 08 21	13
14	2. 1671	2 10 02	2. 1585	2 09 31	2. 1501	2 09 00	2. 1417	2 08 30	14
15	2. 1695	2 10 11	2. 1609	2 09 39	2. 1526	2 09 09	2. 1441	2 08 39	15
16	2. 1720	2 10 20	2. 1633	2 09 48	2. 1550	2 09 18	2. 1465	2 08 47	16
17	2. 1744	2 10 29	2. 1658	2 09 57	2. 1574	2 09 27	2. 1490	2 08 56	17
18	2. 1769	2 10 38	2. 1683	2 10 06	2. 1599	2 09 36	2. 1514	2 09 05	18
19	2. 1794	2 10 46	2. 1708	2 10 15	2. 1623	2 09 44	2. 1538	2 09 14	19
20	2. 1818	2 10 54	2. 1733	2 10 24	2. 1648	2 09 53	2. 1562	2 09 23	20
21	2. 1843	2 11 03	2. 1758	2 10 33	2. 1673	2 10 02	2. 1587	2 09 31	21
22	2. 1868	2 11 12	2. 1783	2 10 42	2. 1698	2 10 11	2. 1612	2 09 40	22
23	2. 1893	2 11 21	2. 1808	2 10 51	2. 1722	2 10 20	2. 1637	2 09 49	23
24	2. 1918	2 11 30	2. 1833	2 11 00	2. 1747	2 10 29	2. 1662	2 09 58	24
25	2. 1943	2 11 39	2. 1858	2 11 09	2. 1772	2 10 38	2. 1687	2 10 07	25
26	2. 1968	2 11 48	2. 1883	2 11 18	2. 1797	2 10 47	2. 1712	2 10 16	26
27	2. 1993	2 11 57	2. 1908	2 11 27	2. 1822	2 10 56	2. 1737	2 10 25	27
28	2. 2018	2 12 06	2. 1933	2 11 36	2. 1847	2 11 05	2. 1761	2 10 34	28
29	2. 2043	2 12 15	2. 1958	2 11 45	2. 1872	2 11 14	2. 1786	2 10 43	29
30	2. 2069	2 12 25	2. 1983	2 11 54	2. 1897	2 11 23	2. 1810	2 10 52	30
31	2. 2095	2 12 34	2. 2008	2 12 03	2. 1922	2 11 32	2. 1835	2 11 01	31
32	2. 2120	2 12 43	2. 2033	2 12 12	2. 1947	2 11 41	2. 1861	2 11 10	32
33	2. 2146	2 12 53	2. 2058	2 12 21	2. 1972	2 11 50	2. 1887	2 11 19	33
34	2. 2171	2 13 02	2. 2083	2 12 30	2. 1997	2 11 59	2. 1912	2 11 28	34
35	2. 2197	2 13 11	2. 2108	2 12 39	2. 2022	2 12 08	2. 1937	2 11 37	35
36	2. 2223	2 13 20	2. 2134	2 12 48	2. 2048	2 12 17	2. 1962	2 11 46	36
37	2. 2249	2 13 30	2. 2160	2 12 58	2. 2074	2 12 27	2. 1988	2 11 56	37
38	2. 2274	2 13 39	2. 2186	2 13 07	2. 2100	2 12 36	2. 2013	2 12 05	38
39	2. 2300	2 13 48	2. 2212	2 13 16	2. 2125	2 12 45	2. 2039	2 12 14	39
40	2. 2326	2 13 57	2. 2238	2 13 26	2. 2151	2 12 54	2. 2064	2 12 23	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$9^h\ 54^m\ 00^s$		$9^h\ 54^m\ 30^s$		$9^h\ 55^m\ 00^s$		$9^h\ 55^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
	Hours.	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	
1	2. 1024	2 06 08	2. 0940	2 05 38	2. 0856	2 05 08	2. 0773	2 04 38	1
2	2. 1047	2 06 17	2. 0964	2 05 47	2. 0880	2 05 17	2. 0796	2 04 46	2
3	2. 1070	2 06 26	2. 0988	2 05 56	2. 0903	2 05 25	2. 0820	2 04 55	3
4	2. 1094	2 06 34	2. 1011	2 06 04	2. 0926	2 05 33	2. 0843	2 05 03	4
5	2. 1118	2 06 42	2. 1034	2 06 12	2. 0949	2 05 42	2. 0866	2 05 12	5
6	2. 1142	2 06 51	2. 1057	2 06 21	2. 0973	2 05 50	2. 0889	2 05 20	6
7	2. 1166	2 06 59	2. 1080	2 06 29	2. 0996	2 05 59	2. 0913	2 05 29	7
8	2. 1189	2 07 08	2. 1104	2 06 37	2. 1019	2 06 07	2. 0936	2 05 37	8
9	2. 1212	2 07 16	2. 1128	2 06 46	2. 1043	2 06 15	2. 0959	2 05 45	9
10	2. 1236	2 07 25	2. 1152	2 06 55	2. 1067	2 06 24	2. 0983	2 05 54	10
11	2. 1260	2 07 34	2. 1176	2 07 03	2. 1091	2 06 32	2. 1006	2 06 02	11
12	2. 1284	2 07 42	2. 1200	2 07 12	2. 1115	2 06 41	2. 1030	2 06 11	12
13	2. 1308	2 07 51	2. 1224	2 07 20	2. 1139	2 06 50	2. 1054	2 06 20	13
14	2. 1332	2 08 00	2. 1248	2 07 29	2. 1163	2 06 58	2. 1078	2 06 28	14
15	2. 1356	2 08 08	2. 1272	2 07 38	2. 1187	2 07 07	2. 1102	2 06 37	15
16	2. 1381	2 08 17	2. 1296	2 07 46	2. 1211	2 07 16	2. 1126	2 06 46	16
17	2. 1405	2 08 26	2. 1320	2 07 55	2. 1235	2 07 25	2. 1150	2 06 55	17
18	2. 1429	2 08 34	2. 1344	2 08 03	2. 1259	2 07 33	2. 1174	2 07 03	18
19	2. 1453	2 08 43	2. 1368	2 08 12	2. 1283	2 07 42	2. 1198	2 07 11	19
20	2. 1477	2 08 52	2. 1392	2 08 21	2. 1307	2 07 51	2. 1222	2 07 20	20
21	2. 1502	2 09 01	2. 1417	2 08 30	2. 1331	2 07 59	2. 1246	2 07 29	21
22	2. 1527	2 09 10	2. 1441	2 08 39	2. 1356	2 08 08	2. 1270	2 07 37	22
23	2. 1551	2 09 18	2. 1465	2 08 47	2. 1380	2 08 17	2. 1294	2 07 46	23
24	2. 1575	2 09 27	2. 1490	2 08 56	2. 1405	2 08 26	2. 1318	2 07 54	24
25	2. 1600	2 09 36	2. 1515	2 09 05	2. 1429	2 08 34	2. 1342	2 08 03	25
26	2. 1625	2 09 45	2. 1539	2 09 14	2. 1453	2 08 43	2. 1366	2 08 12	26
27	2. 1650	2 09 54	2. 1564	2 09 23	2. 1478	2 08 52	2. 1391	2 08 21	27
28	2. 1675	2 10 03	2. 1589	2 09 32	2. 1502	2 09 01	2. 1416	2 08 30	28
29	2. 1700	2 10 12	2. 1614	2 09 41	2. 1527	2 09 10	2. 1441	2 08 39	29
30	2. 1724	2 10 21	2. 1638	2 09 50	2. 1552	2 09 19	2. 1466	2 08 48	30
31	2. 1749	2 10 30	2. 1663	2 09 59	2. 1577	2 09 28	2. 1490	2 08 56	31
32	2. 1774	2 10 39	2. 1688	2 10 08	2. 1601	2 09 36	2. 1515	2 09 05	32
33	2. 1800	2 10 48	2. 1713	2 10 17	2. 1626	2 09 45	2. 1540	2 09 14	33
34	2. 1825	2 10 57	2. 1738	2 10 26	2. 1651	2 09 54	2. 1565	2 09 23	34
35	2. 1850	2 11 06	2. 1763	2 10 35	2. 1676	2 10 03	2. 1590	2 09 32	35
36	2. 1875	2 11 15	2. 1788	2 10 44	2. 1701	2 10 12	2. 1615	2 09 41	36
37	2. 1901	2 11 24	2. 1813	2 10 53	2. 1727	2 10 22	2. 1640	2 09 50	37
38	2. 1926	2 11 33	2. 1838	2 11 02	2. 1752	2 10 31	2. 1665	2 09 59	38
39	2. 1952	2 11 43	2. 1863	2 11 11	2. 1777	2 10 40	2. 1690	2 10 08	39
40	2. 1977	2 11 52	2. 1889	2 11 20	2. 1802	2 10 49	2. 1715	2 10 17	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$9^h\ 56^m\ 00^s$		$9^h\ 56^m\ 30^s$		$9^h\ 57^m\ 00^s$		$9^h\ 57^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	2. 0690	2 04 08	2. 0606	2 03 38	2. 0573	2 03 08	2. 0439	2 02 38	1
2	2. 0713	2 04 17	2. 0629	2 03 46	2. 0546	2 03 17	2. 0462	2 02 46	2
3	2. 0736	2 04 25	2. 0652	2 03 55	2. 0569	2 03 25	2. 0485	2 02 55	3
4	2. 0759	2 04 33	2. 0675	2 04 03	2. 0592	2 03 33	2. 0508	2 03 03	4
5	2. 0782	2 04 42	2. 0699	2 04 12	2. 0615	2 03 41	2. 0531	2 03 11	5
6	2. 0805	2 04 50	2. 0722	2 04 20	2. 0638	2 03 50	2. 0554	2 03 20	6
7	2. 0828	2 04 58	2. 0745	2 04 28	2. 0661	2 03 58	2. 0577	2 03 28	7
8	2. 0851	2 05 06	2. 0768	2 04 36	2. 0684	2 04 06	2. 0600	2 03 36	8
9	2. 0875	2 05 15	2. 0791	2 04 45	2. 0707	2 04 15	2. 0623	2 03 44	9
10	2. 0899	2 05 24	2. 0815	2 04 53	2. 0730	2 04 23	2. 0646	2 03 53	10
11	2. 0922	2 05 32	2. 0838	2 05 02	2. 0754	2 04 31	2. 0670	2 04 01	11
12	2. 0946	2 05 41	2. 0861	2 05 10	2. 0778	2 04 40	2. 0693	2 04 09	12
13	2. 0970	2 05 49	2. 0885	2 05 19	2. 0801	2 04 48	2. 0717	2 04 18	13
14	2. 0993	2 05 57	2. 0909	2 05 27	2. 0825	2 04 57	2. 0740	2 04 26	14
15	2. 1017	2 06 06	2. 0932	2 05 36	2. 0848	2 05 05	2. 0763	2 04 35	15
16	2. 1041	2 06 15	2. 0956	2 05 44	2. 0871	2 05 14	2. 0787	2 04 43	16
17	2. 1065	2 06 23	2. 0980	2 05 53	2. 0895	2 05 22	2. 0810	2 04 52	17
18	2. 1088	2 06 32	2. 1003	2 06 01	2. 0919	2 05 31	2. 0834	2 05 00	18
19	2. 1112	2 06 40	2. 1027	2 06 10	2. 0942	2 05 39	2. 0857	2 05 09	19
20	2. 1136	2 06 49	2. 1051	2 06 18	2. 0966	2 05 48	2. 0881	2 05 17	20
21	2. 1160	2 06 58	2. 1075	2 06 27	2. 0990	2 05 56	2. 0905	2 05 26	21
22	2. 1184	2 07 06	2. 1099	2 06 36	2. 1014	2 06 05	2. 0929	2 05 34	22
23	2. 1208	2 07 15	2. 1123	2 06 44	2. 1038	2 06 14	2. 0953	2 05 43	23
24	2. 1232	2 07 24	2. 1148	2 06 53	2. 1062	2 06 22	2. 0977	2 05 52	24
25	2. 1256	2 07 32	2. 1172	2 07 02	2. 1086	2 06 31	2. 1001	2 06 00	25
26	2. 1280	2 07 41	2. 1196	2 07 11	2. 1110	2 06 40	2. 1025	2 06 09	26
27	2. 1304	2 07 49	2. 1220	2 07 19	2. 1134	2 06 48	2. 1049	2 06 18	27
28	2. 1329	2 07 58	2. 1244	2 07 28	2. 1158	2 06 57	2. 1073	2 06 26	28
29	2. 1354	2 08 07	2. 1269	2 07 37	2. 1183	2 07 06	2. 1097	2 06 35	29
30	2. 1379	2 08 16	2. 1293	2 07 45	2. 1207	2 07 15	2. 1121	2 06 44	30
31	2. 1403	2 08 25	2. 1318	2 07 54	2. 1232	2 07 24	2. 1145	2 06 52	31
32	2. 1428	2 08 34	2. 1342	2 08 03	2. 1256	2 07 32	2. 1169	2 07 01	32
33	2. 1453	2 08 43	2. 1367	2 08 12	2. 1281	2 07 41	2. 1193	2 07 09	33
34	2. 1478	2 08 52	2. 1392	2 08 21	2. 1305	2 07 50	2. 1218	2 07 18	34
35	2. 1503	2 09 01	2. 1417	2 08 30	2. 1330	2 07 59	2. 1243	2 07 27	35
36	2. 1528	2 09 10	2. 1441	2 08 39	2. 1354	2 08 07	2. 1268	2 07 36	36
37	2. 1553	2 09 19	2. 1465	2 08 47	2. 1380	2 08 16	2. 1292	2 07 45	37
38	2. 1578	2 09 28	2. 1490	2 08 56	2. 1404	2 08 25	2. 1316	2 07 54	38
39	2. 1603	2 09 37	2. 1515	2 09 05	2. 1429	2 08 34	2. 1341	2 08 03	39
40	2. 1628	2 09 46	2. 1540	2 09 14	2. 1453	2 08 43	2. 1366	2 08 12	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$9^h\ 58^m\ 00^s$		$9^h\ 58^m\ 30^s$		$9^h\ 59^m\ 00^s$		$9^h\ 59^m\ 30^s$		
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
	Hours.	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	
1	2.0355	2 02 08	2.0272	2 01 38	2.0189	2 01 08	2.0105	2 00 38	1
2	2.0378	2 02 16	2.0295	2 01 46	2.0211	2 01 16	2.0127	2 00 46	2
3	2.0401	2 02 24	2.0317	2 01 54	2.0233	2 01 24	2.0149	2 00 54	3
4	2.0424	2 02 33	2.0340	2 02 02	2.0256	2 01 32	2.0171	2 01 02	4
5	2.0447	2 02 41	2.0363	2 02 10	2.0279	2 01 41	2.0194	2 01 10	5
6	2.0470	2 02 49	2.0386	2 02 18	2.0302	2 01 49	2.0217	2 01 18	6
7	2.0493	2 02 57	2.0409	2 02 27	2.0325	2 01 57	2.0240	2 01 27	7
8	2.0516	2 03 06	2.0432	2 02 36	2.0348	2 02 06	2.0263	2 01 35	8
9	2.0539	2 03 14	2.0455	2 02 44	2.0371	2 02 14	2.0286	2 01 43	9
10	2.0562	2 03 22	2.0478	2 02 52	2.0393	2 02 22	2.0309	2 01 52	10
11	2.0585	2 03 31	2.0501	2 03 00	2.0416	2 02 30	2.0332	2 02 00	11
12	2.0608	2 03 39	2.0524	2 03 09	2.0439	2 02 38	2.0355	2 02 08	12
13	2.0631	2 03 47	2.0547	2 03 17	2.0463	2 02 47	2.0378	2 02 16	13
14	2.0654	2 03 55	2.0570	2 03 25	2.0486	2 02 55	2.0401	2 02 24	14
15	2.0677	2 04 04	2.0593	2 03 33	2.0509	2 03 03	2.0424	2 02 33	15
16	2.0700	2 04 12	2.0617	2 03 42	2.0532	2 03 11	2.0447	2 02 41	16
17	2.0723	2 04 20	2.0640	2 03 50	2.0555	2 03 20	2.0470	2 02 49	17
18	2.0747	2 04 29	2.0664	2 03 59	2.0578	2 03 28	2.0493	2 02 57	18
19	2.0771	2 04 38	2.0687	2 04 07	2.0601	2 03 36	2.0517	2 03 06	19
20	2.0795	2 04 46	2.0710	2 04 16	2.0625	2 03 45	2.0540	2 03 14	20
21	2.0818	2 04 54	2.0734	2 04 24	2.0648	2 03 53	2.0564	2 03 23	21
22	2.0842	2 05 03	2.0758	2 04 33	2.0672	2 04 02	2.0587	2 03 31	22
23	2.0866	2 05 12	2.0782	2 04 42	2.0695	2 04 10	2.0611	2 03 40	23
24	2.0890	2 05 20	2.0805	2 04 50	2.0719	2 04 19	2.0634	2 03 49	24
25	2.0914	2 05 29	2.0829	2 04 58	2.0742	2 04 27	2.0658	2 03 57	25
26	2.0938	2 05 38	2.0852	2 05 07	2.0766	2 04 36	2.0681	2 04 05	26
27	2.0962	2 05 46	2.0876	2 05 15	2.0790	2 04 45	2.0705	2 04 14	27
28	2.0986	2 05 55	2.0900	2 05 24	2.0814	2 04 53	2.0729	2 04 22	28
29	2.1010	2 06 04	2.0924	2 05 33	2.0838	2 05 02	2.0752	2 04 31	29
30	2.1034	2 06 12	2.0948	2 05 41	2.0862	2 05 10	2.0776	2 04 40	30
31	2.1058	2 06 21	2.0972	2 05 50	2.0886	2 05 19	2.0790	2 04 49	31
32	2.1082	2 06 30	2.0996	2 05 59	2.0910	2 05 28	2.0824	2 04 57	32
33	2.1106	2 06 38	2.1021	2 06 07	2.0934	2 05 36	2.0848	2 05 06	33
34	2.1130	2 06 47	2.1045	2 06 16	2.0958	2 05 45	2.0872	2 05 14	34
35	2.1154	2 06 55	2.1070	2 06 25	2.0983	2 05 54	2.0896	2 05 23	35
36	2.1179	2 07 04	2.1094	2 06 34	2.1007	2 06 02	2.0920	2 05 31	36
37	2.1204	2 07 13	2.1119	2 06 43	2.1032	2 06 11	2.0944	2 05 40	37
38	2.1229	2 07 22	2.1143	2 06 51	2.1056	2 06 20	2.0969	2 05 49	38
39	2.1254	2 07 31	2.1167	2 07 00	2.1080	2 06 29	2.0993	2 05 57	39
40	2.1279	2 07 40	2.1192	2 07 09	2.1105	2 06 38	2.1017	2 06 06	40

Hourly change in longitude to westward.	LOCAL APPARENT TIME OF BEGINNING OF INTERVAL.								Hourly change in longitude to westward.
	$10^h\ 00^m\ 00^s$								
	Interval to noon.		Interval to noon.		Interval to noon.		Interval to noon.		
′	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	*Hours.*	*H. M. S.*	′
1	2.0022	2 00 08							1
2	2.0044	2 00 16							2
3	2.0066	2 00 24							3
4	2.0088	2 00 32							4
5	2.0110	2 00 40							5
6	2.0133	2 00 48							6
7	2.0156	2 00 56							7
8	2.0179	2 01 05							8
9	2.0202	2 01 13							9
10	2.0225	2 01 21							10
11	2.0248	2 01 29							11
12	2.0271	2 01 38							12
13	2.0294	2 01 46							13
14	2.0317	2 01 54							14
15	2.0340	2 02 02							15
16	2.0363	2 02 10							16
17	2.0386	2 02 19							17
18	2.0409	2 02 27							18
19	2.0432	2 02 35							19
20	2.0455	2 02 43							20
21	2.0478	2 02 52							21
22	2.0501	2 03 00							22
23	2.0524	2 03 08							23
24	2.0548	2 03 17							24
25	2.0571	2 03 26							25
26	2.0595	2 03 34							26
27	2.0619	2 03 43							27
28	2.0642	2 03 51							28
29	2.0666	2 03 59							29
30	2.0690	2 04 08							30
31	2.0714	2 04 17							31
32	2.0738	2 04 25							32
33	2.0762	2 04 34							33
34	2.0786	2 04 43							34
35	2.0810	2 04 51							35
36	2.0834	2 05 00							36
37	2.0858	2 05 08							37
38	2.0882	2 05 17							38
39	2.0906	2 05 26							39
40	2.0930	2 05 34							40

THIS BOOK IS DUE ON THE LAST DATE STAMPED BELOW

AN INITIAL FINE OF 25 CENTS

WILL BE ASSESSED FOR FAILURE TO RETURN THIS BOOK ON THE DATE DUE. THE PENALTY WILL INCREASE TO 50 CENTS ON THE FOURTH DAY AND TO $1.00 ON THE SEVENTH DAY OVERDUE.

MAY 25 1934

MAY 26 1934

2 Nov'55CT

JUL 11 1966 29

JAN 04 1988

DEC 11 1987

LD 21–100m-7,'33

YD 15650

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